

EXHIBIT 14

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
SOUTHERN DIVISION
No. 7:23-cv-897

-----)
)
IN RE:)
)
CAMP LEJEUNE WATER)
LITIGATION)
)
This Document Relates To:)
)
ALL CASES)
)
-----)

VIDEOTAPED VIDEOCONFERENCE DEPOSITION

UPON ORAL EXAMINATION

OF DAN WADDILL, Ph.D.

TAKEN ON BEHALF OF THE PLAINTIFFS

Norfolk, Virginia

Tuesday, August 6, 2024

11:07 a.m. EST

Reported by:
Bobbi J. Case, RPR, CCR

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2
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Also Present:

Gary Payne, Jr., Video Specialist

Golkow/Veritext Litigation Services

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4 Brian P. Harrison, Wanda Holmes,
5 Edward J. Newbaker, Christopher
6 D. Gamache, Christopher P.
7 Rennix, and Uzo Chukwuma;
8 Subject: RE: Major After
9 Action from DON/ATSDR Meeting of
10 7/16/09; signed by
11 dan.waddill@navy.mil; July 17,
12 2009; 6:07 p.m.; Contains
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14 Persons; 116 pages,
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16 report sheds light on extent of
17 Lejeune water contaminants;
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1 Historical Reconstruction and
2 Present-Day Conditions, Response
3 to the Department of the Navy's
4 Letter on: Assessment of ATSDR
5 Water Modeling for Tarawa
6 Terrace; ATSDR, Atlanta,
7 Georgia, March 2009; 64 pages

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10 CH00000038-44, Disco ID 448046-1
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21 Letter on: Assessment of ATSDR
22 Water Modeling for Tarawa
23 Terrace; ATSDR, Atlanta,
24 Georgia, March 2009; Contains
25 Information Subject to

Protective Order: Do Not
Disclose to Unauthorized
Persons; ATSDR_WATERMODELING_
01-0000887461-887524

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1 Videotaped videoconference deposition
2 upon oral examination of DAN WADDILL, Ph.D., taken
3 on behalf of the Plaintiffs, before Bobbi J. Case,
4 a Registered Professional Reporter and Notary
5 Public for the Commonwealth of Virginia at Large,
6 pursuant to notice, commencing at 11:07 a.m. EST
7 on Tuesday, August 6, 2024, at the offices of
8 NAVFAC Atlantic, Office of Counsel, 6506 Hampton
9 Boulevard, Norfolk, Virginia; and this in
10 accordance with the Federal Rules of Civil
11 Procedure.

12
13 THE VIDEOGRAPHER: This is the video
14 deposition of Dr. Dan Waddill in the matter of
15 Camp Lejeune Water Litigation, U.S. District
16 Court, Eastern District of North Carolina, Case
17 No. 7:23-cv-897.

18 This is being held at 6506 Hampton
19 Boulevard, Norfolk, Virginia.

20 The time is 11:07 a.m., August 6,
21 2024.

22 My name is Gary Payne, Jr., on behalf
23 of Golkow.

24 Will the counsel please introduce
25 themselves?

1 MR. DEAN: Good morning. My name is
2 Kevin Dean. I'm here on behalf of Camp Lejeune
3 plaintiffs.

4 MS. SILVERSTEIN: Kailey Silverstein
5 on behalf of the United States.

6 MR. ANWAR: Haroon Anwar on behalf of
7 the United States.

8 MS. BENTIVEGNA: Jennifer Bentivegna
9 on behalf of the Navy.

10 THE VIDEOGRAPHER: We are now on the
11 record.

12 Would you please swear in the
13 witness?

14
15 DAN WADDILL, Ph.D., was sworn and
16 deposed on behalf of the Plaintiffs as follows:

17
18 DIRECT EXAMINATION

19 BY MR. DEAN:

20 Q. All right. Good afternoon,
21 Dr. Waddill. My name is Kevin Dean. I hope
22 you're doing well this morning.

23 A. Yes, sir. You, too.

24 Q. A couple of preliminaries before we
25 get started, just to make sure you and I are on

1 the same page.

2 Have you ever had your deposition
3 taken before?

4 A. No.

5 Q. Okay. Well, I always tell everybody,
6 welcome to the club.

7 Secondly, I need for you to let me
8 finish my question before you answer, because the
9 court reporter can't take both of us down at the
10 same time.

11 A. Understood.

12 Q. Okay. Also -- of course, I can be an
13 offender of that as well. So if we talk over one
14 another, the court reporter is going to get mad at
15 both of us.

16 Also, I need you to answer orally.
17 Even though video takes down nods of the head, the
18 court reporter needs you to answer yes or no or,
19 you know, answer orally.

20 If you need to take a break, tell me
21 you want to take a break. We can go off record
22 easily enough and come back if we need to.

23 I'm going to try to go through -- I
24 don't know how you feel about lunch. I'm going to
25 try and go through and maybe be finished by 3:00,

1 but if you feel like you want to take, you know, a
2 lunch break, 30 minutes or whatever, that's fine.

3 I know we're getting started late and
4 I apologize, but it's sort of out of my control in
5 Charleston, in the Low Country.

6 I usually try to break every hour or
7 hour and 15 minutes, but if you, again, need a
8 break, let me know.

9 If you don't understand one of my
10 questions, stop me and tell me you don't
11 understand my question. Sometimes I can ask two
12 questions in one sentence and not even recognize
13 it, and I just want to make sure you understand my
14 questions. Okay?

15 A. Okay. Sounds good.

16 Q. All right. And you also understand
17 you're under oath?

18 A. Yes.

19 Q. All right. So for the record, would
20 you give us your full name?

21 A. Dan Waddill.

22 Q. Okay. And, Dr. Waddill, can you tell
23 me a little bit about your -- and just summarize
24 it, maybe beginning with college -- your
25 educational background?

1 A. I graduated from Davidson College in
2 1983.

3 I graduated from Virginia Tech in
4 1998 with a Ph.D. in civil engineering. My
5 emphasis was in the environmental field;
6 specifically, groundwater contaminant transport
7 modeling.

8 Q. Okay. And where are you currently
9 employed?

10 A. I'm employed by NAVFAC Atlantic.
11 That's the Naval Facilities Engineering Systems
12 Command. We say "NAVFAC."

13 So it's NAVFAC Atlantic in Norfolk,
14 Virginia.

15 Q. All right. When did you go to work
16 for NAVFAC?

17 A. 2000.

18 Q. So tell me what you did between 1998
19 and 2000 when you went to work with NAVFAC.

20 A. I was --
21 '98 to 2000.

22 I was working -- yeah, working
23 briefly out West in Colorado.

24 Q. How did it come about that you took a
25 position with NAVFAC?

1 And I guess what I'm asking you is,
2 did you see an ad somewhere? Did you know someone
3 that worked at NAVFAC? Did you see -- apply
4 online? Or how is it that you became aware that
5 there might be an opening and made application to
6 NAVFAC?

7 A. My adviser at Virginia Tech had done
8 work with NAVFAC, and he made me aware of the
9 opening, and I applied for it.

10 It was an online application.

11 Q. Okay. Now, what is your current
12 title or position?

13 A. I'm a supervisor. My title is the
14 Vieques and Munitions Response branch head.

15 Q. What was the first word?

16 A. Vieques. It's V-i-e-q-u-e-s. It's a
17 small island in Puerto Rico.

18 Q. Okay. And so that -- is that sort of
19 like a specific project?

20 A. Yes.

21 We are cleaning up the former Navy
22 bombing and training ranges on Vieques Island.

23 Q. All right. And how long have you
24 been in that role as the branch head?

25 A. I believe, since 2011.

1 Q. All right. And how does it work when
2 you -- I guess what I'm trying to get you to
3 explain to me is, I know that you had some
4 involvement with Camp Lejeune at some sort of a
5 timeframe, and what I'm trying to do right now is
6 sort of bookend your involvement with these
7 different projects, if that's appropriate, all the
8 way back to 2000.

9 So it sounds like to me that you
10 maybe worked with a focus on a particular project
11 for a particular timeframe, and then you may move
12 to something else if you're asked to do so.

13 Is that fair?

14 MS. SILVERSTEIN: Object to form.

15 You can go ahead and answer.

16 THE DEPONENT: Yeah.

17 I mean, I wouldn't say it the way you
18 did, but, yeah, I have had different positions and
19 a different focus over time with NAVFAC.

20
21 BY MR. DEAN:

22 Q. All right. So from 2011 to the
23 present, your focus has primarily been the cleanup
24 activity of this --

25 Where was the island located?

1 A. It's in Puerto Rico. It's just
2 southeast of the main island.

3 Q. All right. Now, did you also work on
4 other projects in that same timeframe?

5 A. Yes.

6 My group does technical support for
7 munitions response projects throughout the Navy.
8 Vieques is our biggest project, but we support
9 many munitions response projects.

10 Q. Well, can you give me an idea of what
11 you would consider other munitions technical
12 support projects that you may have been involved
13 in from '11 to the present?

14 A. You know, everywhere from Hawaii to
15 Virginia.

16 You know, the Navy has project
17 managers that manage these projects, and when they
18 need technical help, they generally come to my
19 group.

20 Q. Let me ask you this about that
21 technical help: Is it focused upon -- is it
22 focused upon the -- when your group is called in,
23 is it technical support related to water modeling
24 issues, or is your focus a little bit broader than
25 groundwater transport and water modeling?

1 A. The work that I do now does not focus
2 on groundwater modeling. That was -- that was my
3 focus prior to 2011.

4 Q. Okay. Okay. That's -- that's where
5 I'm trying to make sure that I'm on the same page
6 and understand your role.

7 So when we're talking about technical
8 support for munitions 2011 forward, which has been
9 what you've been involved in, and your team, it's
10 unrelated to water modeling and contamination
11 issues?

12 A. In general, yes.

13 Associated with munitions sites,
14 there are also contaminants, but we have not done
15 any kind of contaminant transport modeling for
16 that. The big concern is the explosive hazard of
17 the unexploded ordnance.

18 Q. Okay. All right.

19 So what was the -- well, who is your
20 current supervisor, or who do you answer to?

21 A. Byron Brant is my supervisor.

22 Q. B-r-y-a-n-t?

23 A. Well, his first name is B-y-r-o-n.
24 Last name is B-r-a-n-t, Brant.

25 Q. Okay. Do you know what his title is?

1 A. He is the Environmental Restoration
2 division head for NAVFAC Atlantic.

3 Q. Okay. Now, let's go -- let's go back
4 in time before 2011.

5 Is there a project that you --

6 What was your position prior to 2011,
7 and what was the project or projects you were
8 working on?

9 MS. SILVERSTEIN: Object to form.

10 THE DEPONENT: Well, I started with
11 NAVFAC at Southern Division in Charleston, South
12 Carolina, and I was a member of the technical
13 support group, and we supported what the Navy
14 called the Installation Restoration Program, and
15 that involves the cleanup of chemical
16 contaminants, and in that role I worked on a lot
17 of projects.

18 In 2006, I moved to NAVFAC Atlantic,
19 and I continued in the same role working with, you
20 know, the chemical contaminants, and I was the
21 subject matter expert for groundwater modeling and
22 contaminant transport modeling. So that's how I
23 was called upon to support the Camp Lejeune work.
24
25

1 BY MR. DEAN:

2 Q. All right. So you were in Charleston
3 from 2000 to 2006?

4 A. Correct.

5 Q. Okay. Well, then, you know what the
6 Low Country is?

7 A. Yes, sir.

8 Q. Okay.

9 A. Stay dry.

10 Q. Downtown Charleston is flooded right
11 now.

12 And then from 2006 through 2011, you
13 had some involvement working as a subject matter
14 expert dealing with some water modeling issues,
15 and one of those projects was Camp Lejeune?

16 A. Correct.

17 Q. During the time 2006 to 2011, did you
18 work on other groundwater modeling-related
19 contamination chemical issues for other locations?

20 A. You know, I don't recall
21 specifically.

22 I did work with Camp Lejeune
23 groundwater modeling at NAS Jacksonville. That
24 was probably when I was still at Southern
25 Division, though.

1 Oh. And I did -- actually, I did
2 work with the modeling associated with Bethpage.

3 Q. Beth --

4 A. Bethpage in Long Island.

5 Q. Okay. Was that some sort of a
6 chemical spill restoration project?

7 A. Yes.

8 Q. All right. And so we've got three
9 possible or three projects that you worked on from
10 '06 to '11 that related to water modeling. Right?

11 A. Jacksonville might have been prior to
12 '06. I don't really recall.

13 Q. Okay. What were you -- what was your
14 involvement and how long did it last as it
15 concerns the Jacksonville Naval Air Station?

16 MS. SILVERSTEIN: Object to form.

17 THE DEPONENT: I was -- I was not
18 involved in developing the model, but I was
19 involved with the project team that was, you know,
20 cleaning up the base, and part of that work
21 involved using that model for planning purposes.

22

23 BY MR. DEAN:

24 Q. Who was involved in creating the
25 model?

1 A. I do not remember.

2 Q. Okay. But you didn't have any
3 involvement as it concerns the creation of the
4 model, suggesting changes to it, or, actually, you
5 know, running any predictions through it?

6 MS. SILVERSTEIN: Object to form.

7 THE DEPONENT: I did not.

8

9 BY MR. DEAN:

10 Q. How about Bethpage, Long Island?
11 What was your involvement there, more specific?

12 A. I was asked by our Navy leadership to
13 evaluate the groundwater contaminant transport
14 model that had been developed for Bethpage.

15 The model predictions -- the
16 measurements that we were getting in the field did
17 not match the model predictions, and I was asked
18 to evaluate the model and see if there were any
19 problems with it.

20 Q. Okay. All right. We'll come back to
21 that, because that's kind of what I want to talk
22 to you about today.

23 And then -- you came to NAVFAC in
24 2000. I understand Naval Air Station Jacksonville
25 work was in the late '90s or the beginning of the

1 late '90s. Is that right?

2 A. I mean, I don't know.

3 If you're talking about the
4 environmental restoration work, it probably
5 started before then, but I -- I don't know
6 specifically when it started.

7 Q. How many years would you say you were
8 involved with Naval Air Station Jacksonville
9 activities?

10 A. Maybe -- maybe two years, give or
11 take.

12 I do not recall specifically.

13 (Whereupon, Waddill Deposition
14 Exhibit 1, Plaintiff's Notice of Rule 30(b)(1)
15 Individual Deposition, 7 pages, was marked for
16 identification.)

17 (Whereupon, Waddill Deposition
18 Exhibit 1 was displayed via screen share.)
19

20 BY MR. DEAN:

21 Q. All right. Okay. So I've marked as
22 Exhibit 1 to your deposition an individual
23 deposition notice.

24 Have you seen this deposition notice
25 or the amended one that might have changed the

1 date and time?

2 A. I don't -- based on what I can see, I
3 don't believe I've seen it.

4 Q. Okay. Were you -- were you aware
5 that request included a provision for you to
6 search for and produce certain documents to the
7 Department of Justice to produce to plaintiffs?

8 A. Yes.

9 Q. All right. So let's go through a
10 couple of things.

11 MR. DEAN: I'm going to stop sharing
12 on the actual document. I don't need that right
13 now.

14 (Whereupon, Waddill Deposition
15 Exhibit 1 was removed from screen share.)
16

17 BY MR. DEAN:

18 Q. Between 2006 and 2011 -- I'm going to
19 try to see if we can bookend this. If we can't,
20 then tell me.

21 Between 2006 and 2011, you were
22 working in Norfolk. Right?

23 A. Correct.

24 Q. And were you working at an office
25 location or at home, remotely, or a little of

1 both?

2 A. I was working at an office location.

3 Q. All right. And did you have a
4 specific office or a little cubicle or a little --
5 or were you in an open area?

6 A. When I arrived in 2006, I had a
7 cubicle.

8 I was promoted to be a supervisor in
9 2007, I believe, and at that point I had an
10 office.

11 Q. All right. And where was that office
12 located?

13 A. It's at what we call the Lafayette
14 River Annex. It's where NAVFAC Atlantic is
15 located in Norfolk, Virginia.

16 Q. Is your office still there?

17 A. Yes.

18 Q. Do you still have the same office?

19 A. I have had -- I do not have the same
20 office, no.

21 Q. Okay. Now, did you work from a
22 desktop computer, or did you have a laptop that
23 was connected to a network?

24 A. I worked from a desktop computer
25 longer than most people, but I do have a laptop

1 now, and I do not recall when that transition
2 occurred.

3 Q. Okay. And when you worked -- let's
4 talk about the desktop.

5 Did you have -- when you would do
6 work on projects and save them to a file, whether
7 it was a hard drive, C drive, or whether it was a
8 network drive, would you -- would the project name
9 that you were working on be the name of the file
10 as a part of the file?

11 A. I'm sorry. I don't understand the
12 question.

13 Could you repeat it?

14 Q. Yes.

15 So, for example, I don't -- you know,
16 the file structure or the file name may start out
17 with a drive, like a T drive slash something and
18 get down to a project name, Camp Lejeune, Naval
19 Air Station Jacksonville, Bethpage, Long Island,
20 hypothetically, and then under that there would be
21 other folders. That's what I'm asking about.

22 Did you work within some framework of
23 the directory structure of the computer where
24 files were saved on it based on location of the
25 project?

1 A. Yes.

2 I organize my files by -- you know,
3 for example, I had a Camp Lejeune folder, and then
4 within that, I would have subfolders, and all the
5 work that I did for Camp Lejeune would go under
6 that folder. And it was the same for all the
7 projects that I worked on.

8 Q. All right. Now, you're familiar with
9 the Navy regulation and other laws that require
10 you, just like any other employee, to maintain and
11 save and archive certain documents. Right?

12 A. Yes.

13 Q. And that includes e-mails?

14 A. Yes.

15 Q. And did you have a folder of some
16 sort under some of those project files where you
17 would sort the different types of documents,
18 including e-mails?

19 A. Yes.

20 I mean, my e-mails were sorted in
21 Outlook, the same as, you know, with the other
22 files.

23 I had a Camp Lejeune folder in
24 Outlook and everything went into it, with
25 subfolders, of course.

1 Q. All right. Now, you and I are
2 probably -- we may be close to the same age --
3 have transitioned from a work desktop to an iPad,
4 and that's been difficult for me. But you, at
5 some point in time, have transitioned to a laptop,
6 and you don't remember exactly when.

7 Is that right?

8 A. You're breaking up a little bit.
9 I believe you asked if I remember
10 when I transitioned to a laptop?

11 Q. Yes, sir.

12 A. That is correct. I do not remember
13 when.

14 Q. All right. Have you, before today,
15 looked at your laptop to ascertain on it whether
16 there is a file folder named Camp Lejeune?

17 A. Yes.

18 Q. And is there a file on your laptop
19 that says Camp Lejeune?

20 A. Yes.

21 Q. Okay. Now, that file that's on your
22 computer laptop, has anyone asked you to copy the
23 contents of that folder and provide it to them?

24 A. No one has asked me to copy the
25 contents of that folder. I was asked to provide

1 certain information.

2 Initially, it was how big in terms
3 of, you know, megabytes was my Camp Lejeune
4 folder.

5 Q. Well, oddly enough, that was my next
6 question.

7 Can you tell me the size of that
8 folder when you did go and look?

9 A. I cannot say now, because I don't
10 recall, but I did report that to the legal team
11 who was asking me those questions.

12 I believe they were associated with
13 the Department of Justice.

14 Q. Okay. Do you remember whom you
15 communicated that concept to?

16 A. At that time, I was mostly talking
17 with Katie McCormick. She's in D.C., works for
18 the Navy litigation office, I believe.

19 Q. Okay. But you've not been asked to
20 copy that folder yet and provide it to any of the
21 DOJ attorneys?

22 A. No. I was not asked that.

23 Q. Do you by chance have an index that's
24 been pre-created that would tell us what's on your
25 C drive hard drive?

1 A. I do not have an index.

2 Q. Okay. And is it possible -- well,
3 let me ask a different way.

4 Could there be documents on that
5 C drive hard drive that are possibly not on a
6 share drive on your desktop?

7 A. You know, it depends on what you mean
8 by a "share drive."

9 I believe the answer is no, but --

10 Q. Okay.

11 A. -- people use the term "share drive"
12 in different ways, so.

13 Q. Yeah.

14 So let me ask it a little different
15 so we're clear. I'm not trying to hide anything
16 or stump you up.

17 Is it possible that when you got the
18 laptop, you copied your files from the hard
19 drive -- from the computer you had previously been
20 working on, the desktop, and you moved them over
21 to your laptop so you would have your historical
22 data and then you continued to save material there
23 if they related to Camp Lejeune?

24 A. Yes.

25 Everything has been copied over, and

1 so nothing has been lost.

2 Q. Okay. Great.

3 Now, let's move to a different
4 subject, and that is hard copy of documents.

5 Are you aware that the plaintiffs
6 made a request for copies of hard copy documents
7 that you might have in some previous discovery
8 requests?

9 A. Yes.

10 Q. Again, I'm still old-fashioned. I've
11 got the old file cabinets in my office.

12 Did you have in your office a
13 specific location, whether it was a notebook,
14 whether it was a file cabinet, whether it was a
15 drawer, where you kept materials related to Camp
16 Lejeune, or boxes -- or boxes?

17 A. I kept all the Camp Lejeune hard
18 copies in a file drawer.

19 Q. And what was the size of that drawer,
20 as best you can describe it?

21 A. Well, you know, the hard copy was
22 provided to you, I believe, so.

23 Q. Let me withdraw it and ask it a
24 different way.

25 A. Okay. Sure.

1 Q. Do you think, or is it your testimony
2 under oath in this case, that that drawer that
3 contained Camp Lejeune hard copy documents, that
4 you scanned or had scanned all of those documents
5 and sent to the Department of Justice?

6 A. Yes, but let me explain what they
7 asked for exactly.

8 That drawer contained a number of
9 reports that were produced by the ATSDR, and those
10 are publicly available reports. And so I -- I was
11 told not to provide those, because, you know, they
12 weren't specific to me.

13 But all of my files I provided to a
14 paralegal who came and scanned them. And so that
15 was 100 percent of my files. 100 percent of what
16 I was asked to produce, I produced.

17 Q. Okay. Now, those other copies of a
18 different -- I guess it was the different chapters
19 of the ATSDR reports. Right?

20 A. I believe so, yes.

21 I didn't really look back at them. I
22 just know there was a stack of them.

23 Q. By chance, you didn't have tape flags
24 on them, highlights in them, or notes in them?

25 A. I don't know, I mean.

1 Q. Is it possible that they could have
2 had handwritten notes or highlights in those
3 different chapters?

4 A. I just don't recall. I didn't look
5 back at them. I didn't -- I didn't look at them.

6 Q. Okay. Fair enough.

7 Now, who do you remember asking or
8 getting you to be involved in Camp Lejeune and the
9 approximate timeframe?

10 A. The approximate timeframe would have
11 been early 2008.

12 And, you know, I don't recall
13 specifically who asked me, but it would have been
14 somebody at NAVFAC headquarters in D.C.

15 Q. Do you know who a General Stallings
16 may be?

17 A. You know, I do not recall, but...

18 Q. Or Keith -- Keith Stallings or Kevin
19 Stallings? Does that ring a bell?

20 A. No, sir.

21 Q. Okay. What were you asked to do in
22 2008 when you first took this assignment?

23 A. The ATSDR had put out part of their
24 draft report on Tarawa Terrace, and I was asked to
25 review that report and provide an evaluation of

1 it.

2 Q. Okay. And who asked you to do that?

3 A. As I said, I don't recall, but it --
4 it would have been somebody at NAVFAC
5 headquarters, I believe.

6 Q. All right.

7 A. I mean, the request could have come
8 down through my supervisor.

9 Q. Who was your supervisor?

10 A. Byron Brant.

11 Q. Okay. Do you remember if the
12 communication and the task assignment came to you
13 by way of an e-mail, a written memo, or a
14 telephone call, or an in-person meeting?

15 A. I do not recall.

16 It was probably an e-mail.

17 Q. Okay. Did you have a team working
18 with you for the task that you were assigned, or
19 was it just you?

20 A. It was just me.

21 Q. Okay.

22 A. But in completing that task, I did
23 work with a number of other people, you know, from
24 NAVFAC headquarters, and -- but, you know, I was
25 the one evaluating the model.

1 Q. All right. And give me the names of
2 some of those people that you remember.

3 A. Probably, Kim Parker Brown. She was
4 at headquarters.

5 Brian Harrison at NAVFAC
6 headquarters.

7 There were probably others, but I
8 don't remember.

9 With the department of the Assistant
10 Secretary of the Navy, Richard Mach, M-a-c-h.

11 (Whereupon, Waddill Deposition
12 Exhibit 2 Memo from Mary Ann Simmons to Scott R.
13 Williams and Dan W. Waddill; Subject: E-mailing:
14 CL Notification 12-04, CL Studies & Reviews 12-04,
15 CL General Health & Exposure 12-04, CL Legal
16 Issues FAQ 12-04, CL Water Contamination 12-04, CL
17 water model FAQ 12-04; with attachments;
18 December 5, 2008; Contains Information Subject to
19 Protective Order: Do Not Disclose to Unauthorized
20 Persons; CLJA_NAVY_WADDILL_HC_0000000263-318, was
21 marked for identification.)

22
23 BY MR. DEAN:

24 Q. Okay. I'll show you what I'm going
25 to introduce as Exhibit No. 2, and let me know if

1 you can see it in the box.

2 Sometimes you have to refresh, but I
3 don't know -- we need to learn how to refresh that
4 screen. I'm not exactly sure how to do it.

5 A. I have it on the iPad.

6 Q. Is that okay? Can you look at it and
7 I'll ask you a couple of questions?

8 A. Sure.

9 Q. And if you need to take a look at it,
10 feel free.

11 A. Okay.

12 Q. Some of these exhibits -- I'll tell
13 you this, too, for the record, some of these
14 exhibits, the way they were produced to me, they
15 could be 50 pages, okay, for each document. I'm
16 probably going to ask you about certain pages and
17 certain information in them, but I want you to
18 feel comfortable and free. If you want to take
19 some time to look through the document, you just
20 -- you just tell me. Okay? I'm not going to go
21 through every page, is my point.

22 A. Okay. Well, I'm going to take a
23 minute to read what's in front of me here.

24 Q. That's fine.

25 And this first one's pretty long, you

1 know. It's about a 50-page document, so.

2 A. I'm just looking at an e-mail. Is
3 it --

4 Q. Well, if you turn to the next page --
5 I mean, this document is about 50-plus pages long.

6 A. Okay.

7 Q. And that's what I was meaning to tell
8 you.

9 There's only a few pages in the
10 document that I'm going to be talking about. I
11 want you to feel free to peruse the whole
12 document, but if you do that, I'm just warning
13 you, it's going to take us a long time to get
14 through the depo.

15 I just wanted you to know, I'm not
16 going to ask you about every single page.

17 A. Okay. Well, if you want to tell me
18 where you want to start, I can --

19 Q. All right. Let's do that, and if you
20 feel like you need to review something a little
21 bit more after I ask a question about it, feel
22 free to do so.

23 A. Okay.

24 Q. So on page 1, you recognize this as
25 an e-mail that was printed off of your computer,

1 because your name is at the top, left corner.

2 Do you see that?

3 A. Correct. Yes.

4 Q. And it's got the Bates stamp at the
5 bottom of Waddill_HC_263.

6 So that's one of the recently
7 produced hard copies. Right?

8 A. I believe so, yes.

9 Q. All right. So who is Mary Ann
10 Simmons, and what was her involvement with you and
11 this project at Camp Lejeune?

12 A. Mary Ann Simmons worked for the Navy
13 Environmental Health Center. So she was involved
14 in that role.

15 Q. All right. Was she a supervisor?
16 Was she a higher-level rank than you, the same, or
17 were you all collaborating?

18 A. I don't know specifically.

19 We -- our relationship was
20 collaborative.

21 Q. All right. The second -- the next
22 one -- well, let me ask you this:

23 What was her primary -- what was your
24 understanding of her involvement and contribution?

25 A. You know, she worked for the

1 Environmental Health Center. So, you know, my
2 understanding is it had something to do with the
3 health and medical aspect of all of this, as
4 opposed to my role was with the water modeling.

5 Q. Okay. And then there's a gentleman
6 by the name -- the next one it says it's to --
7 your name is listed there, but it's also to Scott
8 Williams.

9 A. Yes.

10 Q. And who is Scott Williams?

11 A. Scott Williams worked for the Marine
12 Corps.

13 He was -- you know, he was in
14 attendance with the meetings, you know. He -- he
15 was -- you know, I worked with him, you know, over
16 time with this.

17 Q. Okay. So do you know what his title
18 or position was with regard to this project at
19 Camp Lejeune?

20 A. I do not.

21 Q. He wasn't a water modeling expert?

22 A. No, he was not.

23 Q. Was he more of -- and I don't mean it
24 negatively, but was he more of a facilitator or
25 liaison type of person?

1 A. I don't believe that would be
2 accurate.

3 He was more, you know -- he was
4 involved, you know, directly with things that went
5 on at Camp Lejeune. You know, that was his
6 location, and he was involved with the
7 environmental issues there.

8 Q. Okay. Had you had any communications
9 with him since 2011 when you left the Camp Lejeune
10 project?

11 A. Well, I didn't say I left the Camp
12 Lejeune project in 2011.

13 My involvement was significant in
14 2008 and '9 and probably '10. And then, you know,
15 I had some involvement, you know, a while after
16 that. I don't recall.

17 Q. Okay.

18 A. But then I didn't answer -- there was
19 another part to your question that I don't recall.

20 Q. Well, my question was whether or not
21 had you continued to communicate with Scott
22 Williams in the past five years, hypothetically,
23 relating to Camp Lejeune, either in person or by
24 e-mail.

25 A. Not that I recall, no.

1 Q. Okay. And that reminds me, what did
2 you do to prepare for your deposition?

3 So let me explain what that question
4 is exactly.

5 I'm asking not what you discussed,
6 but I'm asking whom you talked to about your
7 deposition and documents related to it in the
8 past, say -- well, let me strike that.

9 When did you first -- did someone
10 speak to you about what your historic knowledge
11 and documents might be related to Camp Lejeune?
12 Was it six months ago or a year ago, or do you
13 remember?

14 A. I do not remember exactly.

15 It feels like it might have been a
16 couple of months ago when, you know, I first
17 started getting questions about, you know, what
18 do I -- what information do I have related to Camp
19 Lejeune.

20 Q. Okay. And that probably came from
21 Ms. McCormick?

22 A. As best as I remember, it did.

23 Q. Okay. And at some point in time, you
24 found out that you might need to give a
25 deposition?

1 A. Yes.

2 Q. And what I'm asking you is, is when
3 did you first Zoom, have a telephone call, or meet
4 in person with someone about your deposition?

5 A. Yeah.

6 I was informed probably more than a
7 month ago there would be a deposition, and then
8 Thursday, like a week and a half ago -- not last
9 week, but the week before -- we had a Teams call
10 that was referred to as a prep session for the
11 deposition, and that was with legal staff here at
12 NAVFAC Atlantic and the Department of Justice and
13 I believe others in D.C.

14 Q. Was there anybody, other than lawyers
15 or paralegals, on the call? For example, another
16 witness?

17 A. There was not another witness.

18 And I did not know everybody on the
19 call, but my understanding is, they were all legal
20 staff.

21 Q. All right. So that's one Zoom
22 meeting specifically about the deposition.

23 Do you remember how long it lasted?

24 A. Not specifically.

25 I think it was two hours, maybe.

1 Q. Okay. And then had -- did you meet
2 with anyone between that time and today?

3 A. Yes.

4 Yesterday we had in-person prep
5 session here at NAVFAC Atlantic.

6 Q. All right. And how long did that
7 last? Half a day? Eight hours?

8 A. That was a good half a day.

9 We started at 10:00 and we went to, I
10 think, roughly 3:00, with an hour out for lunch.

11 Q. All right. Now, the second series of
12 the questions along those lines.

13 Were you presented with any documents
14 to review?

15 A. At the prep sessions?

16 Q. Yes, sir.

17 A. Yes. Yesterday, I was.

18 Q. Okay. How many documents?

19 A. I think it was just one.

20 Q. And what was it?

21 A. It was a letter from Brian Harrison
22 to the ATSDR, summarizing the Navy's position on
23 water modeling efforts.

24 Q. All right. I think that's about a
25 June 2009 document.

1 Does that sound about right?

2 A. It kind of doesn't, but I don't
3 remember.

4 Q. All right. We'll -- I think I know
5 what you're talking about, and we may go over it
6 today.

7 Did you do any independent work to
8 review any materials to refresh your recollection
9 about certain things that maybe they didn't
10 present to you, but you wanted to take a look at?
11 Some other historic document?

12 A. I did look through the hard copy
13 files that were provided to you.

14 Q. Okay. Did you mark any with any
15 notes, or did you take any notes related to your
16 review of those documents?

17 A. I did not, not since they went to
18 you.

19 Q. Okay. So let's go back to --
20 Do you still have Exhibit 2 up by
21 chance?

22 A. They're going to help me out here.
23 Just a second.

24 Yes. I have it.

25 Q. If you look at the first page of this

1 e-mail dated -- so it's dated December the 5th,
2 2008.

3 Do you see that?

4 A. Yes.

5 Q. How could we ascertain what timeframe
6 in 2008 you started working on this project in
7 relationship to this e-mail?

8 So, for example, you told me sometime
9 in 2008. The e-mail's dated December the 5th,
10 2008. I'm wondering, you know, did you get
11 involved at that time, or was it earlier in the
12 year from which you have a recollection that it
13 might have been in the summer?

14 MS. SILVERSTEIN: Object to form.

15 THE DEPONENT: Yeah. It was earlier
16 than December, I believe, you know. And I don't
17 recall these dates specifically, but I do believe
18 we had a meeting with ATSDR prior to this e-mail.

19
20 BY MR. DEAN:

21 Q. Okay. I think you're probably right.

22 Let me ask you, did you keep a
23 calendar, an Outlook calendar for meetings and
24 telephone calls and things like that?

25 A. Yes. Yeah, somewhat. But I was -- I

1 mean, I was still -- am, old school.

2 I worked off of a paper calendar that
3 I put in my pocket, but I probably had some of it
4 in Outlook, too.

5 Q. Do you still have that paper-calendar
6 notebook or the Outlook calendar, to the extent it
7 had entries on it?

8 A. I don't know. I don't know.

9 I mean, I -- I have all of my
10 e-mails, but I don't know how Outlook saves
11 calendar entries.

12 Q. Okay. All right. So with respect to
13 this specific e-mail, one of the questions that I
14 had for you about it, it looks like Ms. Simmons is
15 circulating to this group, and she has taken one
16 of those documents that is attached and she has
17 marked it up with some comments.

18 As a matter of fact, if you see right
19 there at the bottom of the first paragraph, it
20 says, "I made comments as I went through."

21 Do you see that?

22 The first paragraph, right under the
23 description of attached documents.

24 A. Okay. I see it. Yep. I see it.

25 Q. All right. And then it says, "Scott,

1 your information was really easy to find. Nice
2 job."

3 Do you see that?

4 A. Yes.

5 Q. And then the next sentence says, "One
6 thing that really struck me was the lack of
7 anything at all on uncertainty."

8 Do you see that?

9 A. Yes.

10 Q. I'm not a water modeling expert, but
11 what are you -- do you know what she was meaning
12 there?

13 A. Well, you know, I don't know what she
14 meant specifically, but I -- I understand the idea
15 of uncertainty relating to water modeling. And
16 certainly, at the outset, ATSDR was not addressing
17 that issue adequately, in my opinion.

18 Q. Okay. And what do you know -- what
19 is your definition or understanding of the concept
20 of uncertainty with water modeling issues?

21 A. Well, with respect to, you know,
22 groundwater contaminant transport modeling,
23 uncertainty, in general, is just how -- it's
24 recognizing that you don't know exactly how to
25 estimate all of the inputs. That creates

1 uncertainty with the output.

2 They -- you know, you might get a
3 number for the output, but that's not a sure
4 number. There's an uncertainty associated with
5 it.

6 Q. What was it that ATSDR, in your mind,
7 was not doing appropriately to address the issue
8 of uncertainty?

9 A. Well, they just weren't acknowledging
10 that their output concentrations had, you know,
11 uncertainty associated with it, and that's --
12 that's something that would be typically done.

13 Q. How would -- if they had addressed
14 it, what would it look like, is what I'm trying to
15 understand from your perspective. You're saying
16 they didn't address it in the context you thought
17 they should. What would that have looked like?

18 A. Well, it could be in the form of, you
19 know, error bars on a graph. It could be in the
20 form of, you know, plus or minus certain numbers,
21 you know, like --

22 I mean, there are many different ways
23 to express uncertainty, but the idea is you need
24 to analyze for it and communicate it clearly.

25 Q. Okay. So if you turn to the next

1 page.

2 Let me get back to that page.

3 I guess it begins -- I got messed up.

4 Do you see on the next page there,
5 there's some comments in the blue?

6 MS. SILVERSTEIN: Kevin, what Bates
7 page are you on? I want to make sure that
8 Dr. Waddill is on the right page.

9 MR. DEAN: Yeah. I knew you were
10 going to ask me that, because I sort of dropped
11 mine and it went everywhere. So I was trying to
12 fudge. Let's see the page where we are.

13 THE DEPONENT: Maybe you could read
14 us what's at the top?

15 MR. DEAN: Yeah. I've got mine back
16 in order. We're good now.

17
18 BY MR. DEAN:

19 Q. So it says, "Notification."
20 Bates stamp would be 265.

21 MS. SILVERSTEIN: Great. Thank you.

22 THE DEPONENT: Yes.

23
24 BY MR. DEAN:

25 Q. Okay. I'm not exactly sure --

1 Well, I guess if you look at the
2 e-mail to start with, in the word -- little
3 picture there, you can see there's a document that
4 says "CL Notification," right above the paragraph
5 we just looked at. Do you see that?

6 A. So you're back on the first page?

7 Q. I'm back on the first page.

8 Do you see --

9 A. Yeah. Attachments.

10 "CL Notification," yes, I see it.

11 Q. And there's one that says, "Studies,"
12 one that says "General Health," one says "Legal
13 Issues," one says "Water Contamination," and one
14 says "Water Modeling"?

15 A. Yes.

16 Q. And for the record and for your
17 benefit, I think all of those attachments are
18 here, from what I can tell, as one document.
19 Okay?

20 A. Okay.

21 Q. It looks like to me you printed out
22 the e-mail and you printed out all of the
23 attachments and put them together, but we'll go
24 through it.

25 A. Okay.

1 Q. So on the first one on page 265, the
2 Notification at the top, there's an area there in
3 the center that says, "Comment" in parentheses,
4 "wjsl."

5 A. Okay.

6 Q. Do you see that?

7 A. I do.

8 Q. Do you know, is that a comment you
9 made or someone else? And if so, who is that
10 comment attributable to?

11 A. I mean, I don't think I made the
12 comment.

13 You know, this is something I haven't
14 looked at for, what, 16 years. So I just don't
15 have any recollection.

16 I don't think I would have made the
17 comment, because I wouldn't be wjsl, I don't
18 think.

19 Q. Well, I guess that's one of my
20 questions.

21 Do you know who, of the people on
22 this e-mail, would be referred to as wjsl or what
23 wjsl stands for?

24 A. I do not.

25 Q. Okay. Turn to page 277. Bates stamp

1 277.

2 A. Okay. It's the first time I've used
3 an iPad.

4 There we go. Okay.

5 Q. There is a comment to a paragraph
6 under Question 7.

7 Do you see that?

8 A. I do.

9 Q. And the question at 7 says, "What can
10 we do about adults and children who lived on base
11 and were not conceived, period -- or born at Camp
12 Lejeune, closed parentheses, with health effects?"

13 And then there's a paragraph under
14 that, a response, that says that, "ATSDR, a United
15 States Public Health Agency, established the scope
16 of the survey. ATSDR states that its survey was
17 the first major step to study the potential health
18 effects of BOCs in drinking water on unborn
19 children."

20 And then there's something there in
21 parentheses, an M and a C.

22 Do you see that?

23 A. Yes.

24 Q. Do you know what that refers to?

25 A. No.

1 Q. And then there's a comment that says,
2 "wjs9, Shouldn't we just say unless a connection
3 between exposure and health outcome is
4 established, nothing else can be done?"

5 Do you see that?

6 A. Yes.

7 Q. Is that your comment?

8 A. I'm sure that is not my comment.

9 Q. And why is that?

10 A. Because this is not within my area of
11 expertise, and I would -- I have never made any
12 such comments.

13 Q. Okay. And -- but you recognize that
14 comment as suggesting that unless there's an
15 absolute way to make a connection between exposure
16 and health outcome, there shouldn't be any study
17 taking place to begin with. Right?

18 A. I do not believe that's a correct
19 interpretation of the comment.

20 Q. Well, what is your interpretation?

21 Because what it says, "Shouldn't we
22 just say unless a connection between exposure and
23 health outcome is established, nothing can be
24 done?" What is nothing?

25 A. I don't know.

1 That -- that comment is too vague for
2 me to offer any kind of interpretation.

3 Q. All right. Do you think that the
4 families -- or was it one of the things that you
5 all were doing was to evaluate exposure to these
6 families, including these children?

7 MS. SILVERSTEIN: Object to form.

8 THE DEPONENT: Yeah. I don't think I
9 understand the question.

10
11 BY MR. DEAN:

12 Q. Yeah.

13 I understood that what the Navy and
14 ATSDR were doing, including your review of the
15 activities of ATSDR, was to study or understand if
16 there was any connection between the contamination
17 and the -- any health effects that the people that
18 were exposed may have had.

19 Is that fair?

20 A. You know, the Navy and the Marine
21 Corps wanted to support scientific studies, you
22 know, to -- in support of the people -- the
23 Marines and their families who lived there, you
24 know. So that was definitely a goal of the Navy
25 and Marine Corps.

1 Q. The Navy wasn't trying to hide
2 anything from the residents, the Marines, or their
3 families or children, were they?

4 A. No. Absolutely not.

5 Q. Okay. Turn to page 297 now, if you
6 don't mind.

7 And just tell me when you get there,
8 and we'll move forward.

9 It begins "Legal Issues" at the top.

10 A. Okay. I'm there.

11 Q. Question No. 1 says, "Is any legal
12 action pending against the Marine Corps?"

13 And the answer was, "One lawsuit
14 related to Camp Lejeune's past drinking quality
15 was filed against the United States."

16 Do you see that?

17 A. I do.

18 Q. Were you involved in any of the legal
19 aspects of those early cases that were filed
20 between 2008 and 2010?

21 A. I was not.

22 Q. There's a comment out in the side
23 there that says, "Does this need updated?"

24 Do you see that?

25 A. I do.

1 Q. Do you know what was meant by that?

2 A. No. Nothing specific.

3 I mean, it's just asking does the
4 response need to be updated, I believe.

5 Q. Do you see Question No. 3? At the
6 bottom there it says --

7 And I'll let you get there.

8 Do you see No. 3 at the bottom?

9 A. "I think my medical condition," that
10 one?

11 Q. Yes, sir.

12 A. I see it, yes.

13 Q. Can you read it into the record?
14 No. 3?

15 A. "I think my medical condition/disease
16 is related to the water at Lejeune. What should I
17 do?"

18 Q. And turn to the next page and read
19 the response that is shown on page 299 at the top.

20 A. "You may want to talk with an
21 attorney to decide what to do next."

22 Q. And can you tell me what the comment
23 was that says "wjs3"?

24 A. Yes.

25 Q. And what is it?

1 A. "This is not appropriate."

2 Q. So somebody that's reviewing, editing
3 this document, thought that it was not appropriate
4 to have someone who thinks they may have had some
5 exposure to talk to an attorney. Is that right?

6 MS. SILVERSTEIN: Object to form.

7 THE DEPONENT: Yeah.

8 I don't know what the commenter was
9 thinking.

10

11 BY MR. DEAN:

12 Q. So that's not your quote?

13 A. Absolutely not my quote.

14 Q. And do you remember anything about
15 that?

16 I know it's been a long time. Do you
17 remember anything about that? Who may have made
18 that insertion?

19 MS. SILVERSTEIN: Object to form.

20 THE DEPONENT: I mean, I do not.

21 I just know that everybody on the
22 team that I was working with was focused on
23 health. So if someone thought -- that lived at
24 Lejeune thought they had a medical condition, we
25 were focused on getting them the healthcare that

1 they needed or addressing that condition of -- you
2 know, evaluating their health, not of a legal
3 action. That just wasn't the focus of the people
4 that I was working with.

5
6 BY MR. DEAN:

7 Q. Okay. Do you have a belief that in
8 science, in general, especially when you're
9 dealing with science-related health effects, that
10 scientists who study a particular issue or conduct
11 a long-term study can be biased because they want
12 to see a positive outcome?

13 A. Well, I believe that in science, it's
14 -- it's very important to eliminate bias as much
15 as possible, and the scientific method is designed
16 to do that. And I believe that it's important to
17 follow scientific methods to prevent bias from
18 creeping in.

19 Q. But you don't have a particular
20 opinion or view that these long-term related
21 health studies have a natural concept of bias
22 built into them where scientists want to hype --
23 h-y-p-e -- hype the risk so that their outcome is
24 one that is supportive of the work they're doing?

25 MS. SILVERSTEIN: Object to form.

1 THE DEPONENT: Yeah.

2 I don't have any -- I don't hold any
3 ideas like that. I just know that, you know, if
4 they're working in a scientific manner, then, you
5 know, bias will be eliminated, and I think that's
6 appropriate.

7 I mean -- and that bias, if it exists
8 at all, will be eliminated.

9 MR. DEAN: Let me know when you get
10 Exhibit 3 in your folder there. I want to take a
11 look at it.

12 (Whereupon, Waddill Deposition
13 Exhibit 3, Epimonitor, Special Issue, An Interview
14 with Geoffrey Kabat, Epidemiologist at the Albert
15 Einstein College of Medicine and Author of "Hyping
16 Health Risks--Environmental Hazards in Daily Life
17 and the Science of Epidemiology"; Contains
18 Information Subject to Protective Order: Do Not
19 Disclose to Unauthorized Persons;
20 CLJA_NAVY_WADDILL_HC_0000000545-562, was marked
21 for identification.)

22 THE DEPONENT: Okay. I have it.

23

24 BY MR. DEAN:

25 Q. All right. This is a -- this is an

1 interview with a Dr. Kabat, K-a-b-a-t.

2 A. Uh-huh.

3 Q. Sir?

4 A. Yes.

5 Q. And it's Bates-stamped Waddill hard
6 copy 545.

7 A. Right.

8 Q. If you turn to page 547.

9 MR. DEAN: And, Kailey and Haroon, I
10 want to bring to you-all's attention something
11 that I've noticed.

12 Page 546 is a blank page. Do you see
13 that?

14 MS. SILVERSTEIN: Yeah. I see that.

15 MR. DEAN: Can we agree that every
16 time Sarah advocates that you all produce
17 16 million pages of documents, she Bates-stamps
18 every other page so she can increase her count,
19 which in reality, is only 8 million pages?

20 MS. SILVERSTEIN: I don't think we
21 agree with that, Kevin.

22 I agree there's a blank page here,
23 but I don't think I agree with that for all of the
24 documents.

25 MR. DEAN: All right. Well,

1 sometimes a little humor helps.

2 MS. SILVERSTEIN: All right. Point
3 taken.

4
5 BY MR. DEAN:

6 Q. So on page 547, Dr. Waddill, do you
7 see some handwritten marks on the document?

8 A. Yes.

9 Q. Are those yours?

10 A. I believe they are.

11 Q. What was the purpose of your pulling
12 up this article and saving it to this file for
13 this Camp Lejeune litigation, in general?

14 A. I don't recall.

15 I mean, I don't recall the --
16 receiving the article or reading it. But, you
17 know, it's -- it expresses the author's views on
18 epidemiology, which is, you know, a subject that I
19 really don't know anything about.

20 Q. Well, this came out, evidently, in a
21 periodical called The Epidemiology Monitor in
22 November 2009.

23 Do you see that?

24 A. I see that.

25 Q. Do you -- do you prescribe or have a

1 subscription to this magazine?

2 A. No.

3 Q. Do you know how you came to acquire
4 this article?

5 A. No.

6 Q. Did you ask someone to send it --
7 somebody to send it to you, or did you look it up
8 on the Internet?

9 A. I just don't recall.

10 Q. Do you agree with the statements that
11 are made in it that you underlined?

12 A. Like I say, I don't -- you know,
13 epidemiology is not my field, and -- so I would --
14 I would -- I cannot say that I agree with any of
15 this. I was just underlining the portions that
16 seemed interesting to me.

17 Q. Did you use it, this article or any
18 of its suggestions on how to proceed with work
19 that you were doing with others on this Camp
20 Lejeune ATSDR review water modeling aspect?

21 A. I don't believe I did.

22 You know, this is dealing with
23 epidemiology, and my piece of the project was the
24 groundwater and water distribution modeling, not
25 epidemiology.

1 Q. So can you turn to page 553?

2 I believe it says, "Kabat interview
3 continued from page 4." So it would be page 5.

4 Do you see that?

5 A. Yes.

6 Q. Do you see in the top, right-hand
7 corner you've underlined a response by Dr. Kabat
8 that reads as follows: "Another step would be to
9 be more careful in vetting the makeup of members
10 of committees to evaluate a hazard to exclude
11 those with a strong professional or an ideological
12 investment in a given issue."

13 Do you see that?

14 A. I do.

15 Q. And you've written out beside that,
16 "Camp Lejeune."

17 Do you see that?

18 A. I do.

19 Q. Do you know why you wrote Camp
20 Lejeune out beside that and why you underlined it?

21 A. I don't recall. This is 15 years
22 ago.

23 Q. Well, as far as the committees that
24 evaluated -- you know, any formal committees that
25 evaluated the ATSDR studies, the only one -- well,

1 there might have been some other panels, but the
2 primary one was the one by the National Academy of
3 Science, also referred to as the NRC 2009 report.
4 Right?

5 A. Well, the NRC did do a report in
6 2009.

7 Q. Do you -- do you agree with that
8 statement by Dr. Kabat there that I just read to
9 you?

10 A. You know, I don't see how that could
11 be done. So I really don't agree with it.

12 And again, this is -- you know, this
13 is not my area, epidemiology.

14 I ultimately did see at least one of
15 their epidemiological reports, but my evaluations
16 were focused on the -- the water modeling.

17 Q. Well, I understand that.

18 But in the NRC 2009 report --

19 You read it. Right?

20 A. Yes, sir.

21 Q. And you know it contains a section or
22 some discussion about water modeling aspects.
23 Right?

24 A. Yes.

25 Q. And you know that, I guess, summary,

1 big picture of what NRC was -- report findings
2 were, that because there was a lack of data at
3 Tarawa Terrace, there was inability to have
4 accurate predicted monthly concentrations?

5 Do you remember that?

6 A. I do.

7 Q. And I believe that the only water
8 modeling expert on that panel was Dr. Prabhakar
9 Clement.

10 Do you remember him?

11 A. I do remember the name. I do not
12 remember --

13 You're talking about the panel --

14 Are you talking about the NRC members
15 or a different panel?

16 Q. Yes.

17 A. Okay.

18 Q. The NRC panel 2009 report, there was
19 a gentleman by the name Dr. Prabhakar Clement, I
20 believe at the time from Auburn University?

21 A. I do recall his name, yes.

22 Q. Did you ever communicate with him,
23 either before or after issuance of the NRC report?

24 A. Not that I recall.

25 Q. Do you know a lady by the name of

1 Susan Martel at NRC?

2 A. I do not recall that name.

3 Q. Do you remember having any
4 communications with her, either before or after
5 the committee was formed or the report issued?

6 A. No. I do not remember any
7 communications like that.

8 Q. Okay.

9 A. I mean, I will say that, you know,
10 the National Research Council pulls from the
11 National Academies of Science and Engineering and,
12 you know -- you know, that's like the all-star
13 team for scientists and engineers, and nobody on
14 that panel, in my opinion, would have had any kind
15 of bias or ideological investment. I mean, if
16 they did, they just wouldn't be in that position.

17 Q. Why do you say that?

18 A. Because, you know, they've
19 demonstrated that they -- they do science the
20 right way, and they -- you know, based on their
21 achievements as scientists, you know, that track
22 record speaks for itself. And I just...

23 Q. Well -- I'm sorry.

24 A. You're breaking up.

25 Q. Let me know when you've finished.

1 A. Oh, I'm done.

2 You're breaking up a little bit.

3 Q. What I was trying --

4 Go ahead.

5 A. I was just saying, you're breaking up
6 a little bit.

7 Q. Okay. So given what you just said,
8 you know, the high quality of the participants of
9 the National Academy of Sciences, when one of
10 these groups is put together, you would assume
11 that there's a certain level of vetting to make
12 sure you weed out people who have a predetermined
13 bias.

14 Would you agree with that?

15 A. No.

16 I'm just saying that, you know, the
17 National Academy of Science and the National
18 Academy of Engineering, those are -- you know,
19 people are -- become a part of those groups after
20 very significant achievement.

21 Q. I understand, but I'm asking about if
22 you're going to have an impartial committee, an
23 impartial review, do you want somebody serving on
24 that that has subject matter bias, or not?

25 A. Well, I mean, I think that question

1 answers itself.

2 I mean, I've said that, you know,
3 bias is not appropriate in science.

4 Q. And, therefore, you agree with me
5 that if you're going to establish an independent
6 committee to do a review like this, you would want
7 to have a certain level of vetting. Right?

8 MS. SILVERSTEIN: Object to form.

9 THE DEPONENT: Yeah. I mean, I'm not
10 agreeing with that.

11 You know, I wasn't involved with the
12 NRC report. I just know that it's the mission of
13 the NRC to, you know, evaluate scientific issues
14 and provide independent reports to policymakers
15 and to the public, and that's -- that's their
16 role.

17
18 BY MR. DEAN:

19 Q. And you used the word "independent."
20 Who do you think participated in
21 choosing the members of the committee?

22 A. I do not know.

23 You're talking about the committee of
24 NRC people who reviewed --

25 Q. Yes.

1 A. I don't know how they were chosen.

2 Q. Well, you know that the Navy
3 contracted with the NRC for the study. Right?

4 A. That is my understanding, yes.

5 Q. And do you think it's okay for the
6 Navy to participate in choosing who is going to be
7 on the committee, or not?

8 A. Well, the Navy -- my understanding is
9 the Navy funded the project, but I don't know who
10 was involved in choosing the members of the
11 committee.

12 Q. Well, if it's going to be an
13 independent study and you wanted a nonbiased
14 report issued, you would assume that the person
15 asking for the study is not participating in who
16 is on the committee. Right?

17 A. I mean, I don't -- I don't know how
18 to answer that.

19 I don't make any assumptions about
20 that kind of thing. I just -- I just wasn't
21 involved in that.

22 Q. Okay. But you do agree it would need
23 to be an independent panel?

24 A. Well, the -- what I said was, you
25 know, the purpose of the NRC -- and I believe you

1 can find this on their -- on the website, is to
2 provide independent reviews of scientific issues
3 in order to support policy and the public.

4 So that's -- you know, that's their
5 mission. That's why they're there.

6 You know, how they get there, you
7 know, I don't know. They pull people from the
8 National Academy of Science and Engineering, and
9 those are highly respected scientists.

10 Q. Okay. Let's move on to something
11 else.

12 Do you know who Dr. --

13 MS. SILVERSTEIN: Hey, Kevin? Before
14 we get into the next line of questioning, we've
15 been going for about an hour and a half. Can we
16 take a break soon?

17 MR. DEAN: I'm perfectly fine with
18 taking a break now. I get on a roll, having fun.
19 So let's take a break.

20 MS. SILVERSTEIN: Great. Thanks.

21 THE VIDEOGRAPHER: We're going off
22 the record at 12:33 p.m.

23 (Whereupon, a recess was taken from
24 12:33 p.m. to 12:45 p.m. EST.)

25 (Whereupon, Waddill Deposition

1 Exhibit 4, Memo from Dan W. Waddill to Scott R.
2 Williams and Kim P. Brown; Subject: RE: Agenda
3 for July 15 DHWG meeting; July 8, 2010; Signed by
4 dan.waddill@navy.mil; with attachment; Contains
5 Information Subject to Protective Order: Do Not
6 Disclose to Unauthorized Persons;
7 CLJA_NAVY_WADDILL_HC_0000000975-1011, was marked
8 for identification.)
9

10 BY MR. DEAN:

11 Q. And let's go take a look at the
12 exhibit folder and let's go to Exhibit No. 4.

13 A. Okay. I'm there.

14 THE VIDEOGRAPHER: Doctor, could you
15 clip your mic back on?

16 THE DEPONENT: Oh, yeah. Sorry.
17 Okay.
18

19 BY MR. DEAN:

20 Q. Are you ready?

21 A. Yes.

22 Q. This is Exhibit 4 to your deposition,
23 and it begins with a Waddill hard copy Bates stamp
24 975. And mine, the way it was produced, goes
25 through page 1011.

1 Do you recognize this as an e-mail
2 you printed off that you also authored and sent to
3 Scott Williams and others on July 8, 2010?

4 A. Yes.

5 Q. And on -- you said -- in the first
6 paragraph or so, you say, "Hi, Scott. I hope
7 these comments may be helpful. Please let me know
8 if you have questions or would like more detail.
9 Dan."

10 And then can you read what you said
11 about Slide 56?

12 A. "Slide 56 is vague. It summarizes
13 some issues from the NRC report, but it does not
14 begin to capture all the issues or the magnitude
15 of the issues."

16 Q. So the draft comments that are
17 referred to there that are attached, it has a file
18 name of Draft Comments -- Draft_Comments_2.

19 Do you see that?

20 A. I do.

21 Q. And do you see that it's -- you were
22 specifically talking about Slides 56 and 57.

23 Do you see that?

24 A. I do.

25 Q. I will give you an opportunity to

1 look through this attachment --

2 A. Okay.

3 Q. -- but I do not see the referenced
4 attachment and your Draft_Comments_2.

5 I have searched through all the
6 documents produced by the government, for the
7 record, and if you type in a search term for that
8 attachment, it does not show up having been
9 produced.

10 And if you turn to your comments
11 section on the next two pages, you'll notice
12 there's only comments for Slides 5, 6, 12 through
13 18, and 20 through 38, and I just don't see any
14 comments on the slides that you're commenting
15 about. So if I'm wrong, correct me.

16 Looking through this document, I'm
17 just having trouble finding the attachment or
18 references to those slides.

19 A. Yeah.

20 I'm looking through.

21 Well, I'm not sure how far I should
22 look down, but I don't see anything about
23 Slides 56 and 57.

24 Q. So evidently -- okay.

25 Go ahead.

1 A. Other than in the e-mail on the first
2 page.

3 Q. You seem to be commenting about a
4 PowerPoint presentation.

5 So if you -- if you look further down
6 the e-mail, you'll see where Scott Williams sent
7 it to you at 4:20 the day before.

8 Do you see that?

9 A. Oh, yes. Yes, I do.

10 Q. And Williams says to you, "Dan, Can
11 you please take a look at Slides 56 and 57 and let
12 me know what you think?"

13 A. Yes.

14 Q. Do you know where -- is it possible
15 that the Draft_Comments_2.PDF that's referenced
16 here is on your laptop computer historical archive
17 file?

18 A. It's possible, yes.

19 Q. Is it possible that those Slides 56
20 and 57 that were forwarded to you on July 7, 2010,
21 at 4:20 p.m. are on your laptop computer?

22 A. Yes. Possible.

23 Q. Do you know why -- do you know who
24 created --

25 Did Scott Williams create this

1 PowerPoint, or do you remember?

2 A. I do not remember.

3 I mean, he asked me to review
4 Slides 56 and 57, but that doesn't mean he created
5 it. He might have, but it could have been someone
6 else.

7 Q. If you look further down, in all
8 fairness, it's been forwarded to Williams by
9 Kelley B. Brix.

10 A. Yes.

11 Q. Who is Kelley.Brix@tma.osd?

12 A. I don't know.

13 The OSD would refer to Office of the
14 Secretary of Defense, I believe.

15 Q. Is it possible that you also have the
16 complete e-mail trail? Because this one seems
17 like you cut -- like you printed off just your
18 first page that had your comments, and then you
19 had made some attachments that you put together.

20 Do you think you might have the
21 complete e-mail that had been forwarded to you?

22 A. Yeah. It's certainly possible.

23 I mean, I didn't -- I didn't make any
24 kind of attempt to print everything out, so.

25 Q. I understand.

1 Just a second.

2 If you turn to page 993,

3 Bates-stamped 993?

4 A. 993.

5 Q. Actually, let's back up a little bit
6 before that.

7 Go to 8- -- 987.

8 A. 987.

9 Okay.

10 Q. Do you know who Professor Mustafa
11 Aral is?

12 A. Yeah.

13 I know a little bit about him. I
14 know he wrote -- he wrote something about the NRC
15 report.

16 Q. Obviously, this is a document that
17 has -- it's dated June the 30th, and it says,
18 "Response to Comments with NRC Report on ATSDR
19 Water Modeling Study."

20 Do you see that?

21 A. I do.

22 Q. So obviously, this is a memo prepared
23 by Dr. Aral that was sent to Morris Maslia at
24 ATSDR, and it became -- you somehow got a copy of
25 it as a part of your work and reviewed this

1 document. Right?

2 A. Yes.

3 Q. And if you turn -- if you turn to
4 page 5 of it. So it's page 991.

5 A. Okay.

6 Q. Down at the bottom, there's a big
7 paragraph that begins, "Thus."

8 A. Yes.

9 Q. And about three-fourths of the way
10 down, you've highlighted, "Also reporting the
11 solubility of PCN water at about half the value of
12 the data reported in ATSDR Chapter D report,
13 (Lawrence 2007) without providing a reference
14 (page 38 of the NRC report) is a scientifically
15 unacceptable practice."

16 Do you see that?

17 A. I do.

18 Q. And you have made a mark there, sort
19 of vertically, capturing what that section -- you
20 know, that section area.

21 Do you see that?

22 A. I do.

23 Q. Why is it that you highlighted and
24 made that mark?

25 A. I do not remember.

1 Q. Do you agree or disagree with his
2 statement?

3 A. Well, you know, I don't have enough
4 context here to really disagree with it. But I --
5 you know, I know the NRC basically responded that
6 they stand behind their report, so. I think they
7 would have disagreed with this.

8 Q. If you turn to page 993. So a couple
9 more pages. 993.

10 A. Yes.

11 Q. At the bottom --

12 Well, earlier, in the top paragraph
13 you've highlighted a section about TechFLOW.

14 Do you see that?

15 A. Yes.

16 Q. And then at the bottom of the last
17 paragraph at the bottom, you've highlighted a
18 paragraph and you've underlined it. It says,
19 "Misrepresentation of the scientific and public
20 domain facts is extremely burdensome and, in my
21 opinion, sheds a dark cloud over the scientific
22 credibility and integrity of the NRC report."

23 Do you see that?

24 A. I do.

25 Q. And then you made a mark, same as you

1 made before, and you wrote in your own
2 handwriting, "Dark cloud."

3 A. Yes.

4 Q. Do you know why you wrote the words,
5 "Dark cloud"?

6 A. I do not recall.

7 Q. Were you agreeing at the time with
8 his statement, or not?

9 A. I was not agreeing, no.

10 Q. So you disagree with this statement?

11 A. Let me get the context here. Give me
12 a minute.

13 Q. Sure.

14 A. Well, I certainly believe that the
15 NRC report had scientific credibility and
16 integrity.

17 So in that sense, I disagree with
18 this statement.

19 Q. And the reason that you feel like
20 that the NRC committee that we're talking about
21 had scientific validity and credibility, I think
22 is your words -- if it's not, I apologize -- the
23 reason you say that is because your general
24 understanding that this is a world-renowned,
25 independent, nongovernmental entity that's

1 comprised of these world-renowned scientists who
2 are all impartial. Right?

3 MS. SILVERSTEIN: Object to form.

4 THE DEPONENT: Yeah. I would not say
5 that.

6 I was using the words "credibility"
7 and "integrity" because that's what Dr. Aral --
8 those are the words that he used.

9 The reason I believe that their
10 report has credibility and integrity is because
11 of, you know, what they said about the water
12 modeling in the report. It just -- it matched
13 with the scientific approach that's required in
14 that field.

15 So, you know, they -- they
16 demonstrated, not only through their credentials,
17 but also in what they wrote in their report, that
18 it has integrity and credibility.

19
20 BY MR. DEAN:

21 Q. And you -- as of today, you don't
22 have any reason to believe that there's anything
23 in that 2009 report that is -- that you disagree
24 with? You agree with the report and its
25 conclusions?

1 A. You're talking about the 2009 NRC
2 report. Right?

3 Q. Yes, sir.

4 A. Yeah.

5 You know it covered a lot of topics,
6 and I only looked closely at the water modeling
7 sections. I did glance through some of the other
8 sections.

9 But, you know, I would say, in
10 general, I thought the report was well written and
11 accurate.

12 Q. Okay. Do you know whether or not the
13 Marine Corps, including its civilian employees
14 working under NAVFAC, provided an appropriate
15 level of documentation in a timely fashion to the
16 ATSDR to do their work?

17 MS. SILVERSTEIN: Object to form.

18 THE DEPONENT: Well, I do know from
19 sitting at meetings that the Marine Corps provided
20 voluminous amounts of information to ATSDR, and
21 they went to great effort to provide everything
22 that ATSDR asked for.

23
24 BY MR. DEAN:

25 Q. Do you know whether or not the Marine

1 Corps or NAVFAC or its other associated people
2 involved withheld any data from ATSDR?

3 MS. SILVERSTEIN: Object to form.

4 THE DEPONENT: I mean, I'm sure
5 nobody withheld anything.

6 That's just -- it's just not
7 something that anybody I work with -- we actually
8 do the opposite. We want to make everything
9 available and go to great effort to do that.

10
11 BY MR. DEAN:

12 Q. Were you ever concerned that there
13 was -- with data being withheld or that ATSDR was
14 going to accuse the Navy of withholding data?

15 MS. SILVERSTEIN: Object to form.

16
17 BY MR. DEAN:

18 Q. Were you worried about that?

19 MS. SILVERSTEIN: Object to form.

20 THE DEPONENT: I think there's a
21 couple of questions in there.

22 I was never concerned that the Navy
23 or Marine Corps was withholding data. I know
24 that's -- that's just not the case. As I've said,
25 it is the exact opposite. People were going to

1 great effort to get ATSDR everything they wanted.

2 But I was aware that ATSDR --

3 Pardon me?

4 I was aware that ATSDR --

5
6 BY MR. DEAN:

7 Q. Were you were worried that ATSDR --

8 A. Kevin, you're breaking up.

9 MR. ANWAR: Kevin, since you're not
10 on --

11 And we can go off the record for a
12 second.

13 THE VIDEOGRAPHER: Going off the
14 record at 1:02 p.m.

15 (Whereupon, a recess was taken from
16 1:02 p.m. to 1:03 p.m. EST.)

17
18 THE VIDEOGRAPHER: Back on the record
19 at 1:03 p.m.

20
21 BY MR. DEAN:

22 Q. Let me ask the question again, and I
23 apologize, Mr. Waddill, because I didn't hear your
24 response.

25 My question was: Were you concerned

1 that ATSDR was going to claim or allege that the
2 Marines had withheld data?

3 A. Well, I mean, I did observe them in
4 meetings or complaining or saying that they didn't
5 have all of the data that they needed, and, you
6 know, the Marine Corps personnel took that to
7 heart. And so, you know, it did concern me.

8 But I don't -- I don't believe they
9 ever -- I don't believe they ever implied that
10 anyone was withholding information. It's just
11 that there's so much of it, they didn't have
12 everything that they wanted.

13 And, you know, that's -- that's a
14 concern, because that can be -- that kind of thing
15 can be misunderstood.

16 (Whereupon, Waddill Deposition
17 Exhibit 5, Camp Lejeune Data Mining Technical
18 Workgroup Plan of Operation, July XX, 2010, Draft,
19 July 9, 2010, "Do Not Cite or Quote"; Contains
20 Information Subject to Protective Order: Do Not
21 Disclose to Unauthorized Persons;
22 CLJA_NAVY_WADDILL_HC_0000000421-454, was marked
23 for identification.)
24
25

1 BY MR. DEAN:

2 Q. So take a look at Exhibit 5. I just
3 put it in your folder.

4 For the record, this is a collection
5 of documents beginning Waddill hard copy 421
6 through 454.

7 A. Okay.

8 Q. Got it?

9 A. Yes.

10 Q. The only page I'm interested in in
11 this collection of documents is page 441.

12 A. 441. Okay.

13 Q. I want to make sure I can understand
14 your handwriting, for the most part. Okay?

15 A. Okay.

16 Q. This is your handwriting on this
17 page. Right?

18 A. Yes.

19 Q. All right. And according to the
20 document for which it's attached to, the
21 document --

22 If you need to flip back to page 1,
23 feel free to, but it says a draft dated July
24 the 9th, 2010.

25 A. Okay. Sorry. Say that again?

1 Q. Actually, at the top of the page --

2 A. Okay.

3 Q. -- on 441, doesn't it say July 8,
4 2010, draft?

5 A. Yes, it does.

6 Q. All right. Can you just read at the
7 bottom so it's in your way which you believe it
8 should be read? Can you read it into the record
9 for me? Below -- the section below the block?

10 A. Okay.

11 "We don't know the timing of the
12 releases. Big data gap that cannot be filled. We
13 have no concentration data from the '60s -- 1960s
14 and 1970s."

15 "If we" -- and that's not -- thought
16 is not finished.

17 "Completeness. Focus on the data
18 (that the model is sensitive to). Evaluate the
19 quality of the data. How would a nonexpert find
20 some of this info. In case that there is no data,
21 will we all certify that there is no data."

22 And then in parentheses, "Will ATSDR
23 say that Marine Corps has not withheld data?"

24 Q. There's a note you missed there.

25 A. Yeah.

1 To the right it says, "wife" with an
2 arrow, "grocery store, (needle in haystack)."

3 Q. Do you have the context of why you
4 had those in that location?

5 A. I don't recall. That doesn't make
6 any sense to me.

7 Q. I can tell you, my wife does not get
8 lost in a grocery store.

9 But you did recognize that there was
10 some sort of a perception or struggle between the
11 Marine Corps and ATSDR about whether ATSDR was
12 getting all the information and whether or not
13 there was a claim that there might be some
14 withheld data. Because that's why you made the
15 note. Right?

16 A. Well, as I said before, you know, I
17 was at this meeting.

18 I was aware that ATSDR felt like they
19 didn't have all the data. And, you know, that's
20 certainly reasonable, given, you know, it's years
21 of data, and it's just -- it's a lot of it.

22 And as I said, I know the Marine
23 Corps was making every effort to do so.

24 And I'm not aware of -- I'm not aware
25 of ATSDR ever saying that the Marine Corps

1 withheld data.

2 And, you know, I think the note, "In
3 case that there is no data, will we all certify
4 that there is no data," I think that might have
5 been the request that ATR was making.

6 And in parentheses, it was just my
7 thought that, you know, in return, would they
8 acknowledge that we're not withholding data.

9 It never -- like I said, none of this
10 ever materialized. We just -- the Marine Corps
11 just kept giving them information as requested,
12 everything that they could.

13 Q. Let's go back to one exhibit,
14 Exhibit 4. I think I forgot to ask you a question
15 before we took a break earlier.

16 And if the team wants to take a lunch
17 break now, that would be a good time, but I just
18 want to quickly go back to Exhibit 4.

19 A. Okay. Okay.

20 Q. At the bottom of the e-mail, we had
21 finished the ones about the slides up front.

22 Actually, you know what? Maybe I
23 didn't show you this exhibit.

24 Let me show -- let me check
25 something.

1 A. You're talking about 975?

2 Q. You know, you're exactly right. I'm
3 pulling up a --

4 Let me see here.

5 Let's see.

6 Let's just go ahead and take a break
7 now. I guess I was finished with that Exhibit 4.
8 I'm thinking of a different exhibit number, and we
9 can do that after lunch.

10 Tell me how much time you need. The
11 shorter the better, but I know you guys have a
12 long drive.

13 MR. ANWAR: Do you want to go off the
14 record?

15 MR. DEAN: Can we go off the record?

16 THE VIDEOGRAPHER: Going off the
17 record at 1:12 p.m.

18 (Whereupon, a lunch recess was taken
19 from 1:12 p.m. to 2:07 p.m. EST.)

20

21 THE VIDEOGRAPHER: Back on the record
22 at 2:07 p.m.

23 (Whereupon, Waddill Deposition
24 Exhibit 6, ATSDR Modeling Report, Tarawa Terrace,
25 Contains Information Subject to Protective Order:

1 Do Not Disclose to Unauthorized Persons,
2 CLJA_NAVY_WADDILL_HC_0000000645-694, was marked
3 for identification.)
4

5 BY MR. DEAN:

6 Q. Okay. Dr. Waddill, can you take a
7 look at the folder, and I've just put Exhibit 6 in
8 there.

9 A. Okay.

10 MR. DEAN: And for the record,
11 Exhibit 6, again, is Bates-stamped Waddill hard
12 copy 645, and it goes through 694, it appears.

13 THE DEPONENT: Okay.
14

15 BY MR. DEAN:

16 Q. Are you there?

17 A. Yes.

18 Q. All right. Number one, do you
19 recognize the handwriting on this document?

20 A. Yes.

21 Q. And is it yours?

22 A. Yes.

23 Q. So this -- this -- these notes --
24 If you look at the title on page 1, I
25 guess you were in some sort of a meeting or you

1 were somewhere where you were taking notes related
2 to Tarawa Terrace water model.

3 A. I don't remember, but undoubtedly,
4 that's the way it was, yes.

5 Q. Okay. And if you turn to Item 14 on
6 the second page?

7 A. Okay.

8 Q. First of all, I don't know the timing
9 of this document. I don't see -- I don't know if
10 you remember, but I don't see dates on it.

11 A. Yeah. I don't remember.

12 But, yeah.

13 Do you have a question about 14?

14 Q. I believe it is around in 2008, and
15 I'll show you why in a little bit.

16 But in any event, Item 14, there is a
17 star and it says, "how much real data available."

18 A. Yeah.

19 Q. What were you thinking there? What
20 was your question about what data?

21 A. Well, the data would be, you know,
22 concentration of contaminants.

23 So, you know, early on it seemed
24 clear that there was not much of that kind of data
25 available. And, you know, ultimately, the reports

1 said exactly how much was available. But at this
2 point, I didn't know. And so that was, to me, an
3 important question and I noted it there.

4 Q. Well, do you currently hold a belief
5 that the Tarawa Terrace water modeling by ATSDR
6 was deficient because of a lack of real data?

7 A. Well, I certainly, you know, observed
8 and presented this to ATSDR numerous times that,
9 you know, since concentrations of contaminants
10 were only available -- measured concentrations
11 were only available in the '80s, that that made
12 modeling the concentrations in the '70s and the
13 '60s and the '50s a very difficult proposition.

14 Q. So -- and we can go through some
15 other documents, but from my studying you over the
16 last few weeks, your writings, that seems to be
17 one of your, sort of, top-tier criticisms of the
18 ATSDR water modeling project, was this issue
19 concerning lack of real measured data.

20 Is that fair?

21 A. Correct.

22 Because it's that real measured data
23 that ties a model like this to the real world, and
24 if you can't tie the model results to the real
25 world, then the model results just aren't valid or

1 useful.

2 Q. Okay. Now, we'll come back to that.
3 But fast-forward over to Hadnot Point
4 modeling.

5 They certainly had more data there.
6 Right?

7 A. I don't know. I don't remember.
8 I think it was somewhat similar as
9 far as the years when those kinds of
10 concentrations were available.

11 Q. Okay. Well, back to Tarawa Terrace.
12 I guess what you're saying, they only
13 had, like, one set of data, and you're critical of
14 that because you think it lacks the ability to be
15 validated?

16 A. Yes.
17 And ATSDR, you know, agreed and
18 stated that the model was not validated, because
19 they didn't have data to do that step.

20 Q. Where do you understand that was
21 stated, or was that in a meeting?

22 A. You know, I don't recall exactly.
23 I think they said as much in response
24 to some of my comments. And, you know, I believe
25 it was in writing, and it could have also been

1 verbally in meetings.

2 But it was -- you know, there was no
3 dispute that that model was not validated. They
4 freely admitted that there wasn't enough data to
5 validate the model.

6 Q. And I guess what you're saying, if
7 there had been a second set of data available or
8 some other work done like you referred to for
9 validation, that would cause you to relook or
10 question whether, in fact, it was done properly?

11 A. No. I'm definitely not saying that.

12 I'm just saying since there was no
13 data available for the '50s, '60s, and '70s,
14 almost, you know, 35 years of time of interest,
15 that the model is not accurate enough to -- to be
16 useful for the purpose that it was being run.

17 Q. Right.

18 But what I'm asking is a
19 hypothetical, and I recognize that.

20 But what if there was additional data
21 that you were not aware of that was being used to
22 validate the model, would you reconsider that
23 view?

24 A. Well, you know, there is not
25 additional data, and -- but, of course, you know,

1 I would always consider all available data, which
2 I did in this case.

3 Q. As a matter of fact, you've got a
4 note there in Item 17 just below 14, "Other
5 observed data available?"

6 And then you put, "Any other model
7 evaluation done?"

8 Do you see that?

9 A. Yes. I think this was an early
10 meeting where there were more questions than
11 answers.

12 But, you know, the answers, you know,
13 were clear later on, that, you know, the data was
14 only available in the '80s, and the model
15 validation was not done.

16 During this meeting, my notes
17 indicate I couldn't tell what the answers to those
18 questions was yet.

19 Q. All right. So let's flip forward to
20 page 653.

21 A. 653?

22 Q. Yes, sir.

23 And it's some -- an e-mail string
24 with you.

25 A. Okay. Okay.

1 Q. Let's go -- you know, you read
2 e-mails backwards, so let's go to page 655.

3 A. Okay.

4 Q. So do you see that this is an e-mail
5 dated March the 3rd, 2008, and you indicate that,
6 "Hi, Chuck and Peter. Kim and I just talked with
7 some of the folks at NAVFAC headquarters about our
8 meeting with ATSDR last week."

9 Do you see that?

10 A. Yes.

11 Q. And you go down a couple of other
12 sentences and you said, "I'd like to propose that
13 I write a first draft of my thoughts and ask you
14 guys to add comment, revise. Scott and I don't
15 want to engage Peter without your permission.
16 Would that be something you'd support? We'd
17 definitely appreciate Peter's opinion, if it's
18 okay with you."

19 Do you see that?

20 A. I do.

21 Q. So why are you asking about
22 Peter's -- Peter --

23 How do you pronounce his last name?

24 A. Pommerenk, I believe.

25 Q. Pommerenk. Okay. P-o-m-m-e-r-e-n-k,

1 Mr. Pommerenk.

2 Why were you having to ask for
3 permission to consult with Mr. Peter Pommerenk?

4 A. Well, I don't remember specifically,
5 but I think he must have been a contractor who
6 worked for Scott.

7 And so, you know, I would be asking
8 permission because I would not ever task Scott's
9 contractor to do something. It was -- Scott would
10 need to do that himself.

11 Q. And then Kim Brown responds to your
12 e-mail, and she says, "Scott, I have mentioned to
13 Kelly that we, the Navy, had some concerns with
14 the overall water modeling methodology, but didn't
15 feel comfortable stating such in the meeting since
16 we're getting involved much later in the game and
17 plus we all know of all the high visibility CL has
18 gotten already. We thought it would be effective
19 to provide a solid position from a scientific
20 technical perspective. So if all the technical
21 folks could collaborate, then I can provide an
22 overall picture of how everything ties together,
23 along with Kelly's help, since she's been involved
24 on this site much more closer than me, sometime
25 next week for all to review."

1 Do you see that?

2 A. I do.

3 Q. And do you think that the notes that
4 we just looked at on pages 645 through 659, the
5 handwritten notes, probably are talking about that
6 and that's why you have them stapled together,
7 this meeting you all had with ATSDR in late March
8 of '08?

9 MS. SILVERSTEIN: Object to form.

10 THE DEPONENT: Yeah. I don't know.
11 I don't recall anything like that, so.

12

13 BY MR. DEAN:

14 Q. Well, in March of '08, you're asking
15 questions about whether or not there was model
16 validation done and whether or not there was other
17 data?

18 A. You're referring to my notes?

19 Q. Yes, sir.

20 A. Well, I think we already established
21 there's no date on those notes.

22 Q. Well, you're referring to an ATSDR
23 modeling report, and you're making reference --
24 for example, Item 1, Figure 811, and then to ES-4.

25 So you're making reference to a

1 report. Right?

2 A. Sounds like, yeah.

3 Q. Wouldn't that be the draft report
4 that was provided to the Navy before the final was
5 issued?

6 A. I mean, I don't know.

7 Remember, I'm getting all of this out
8 of context. So, you know, I just can't remember
9 that kind of thing.

10 Q. But if you all were questioning back
11 in -- in this e-mail chain that we just read in
12 the end of March 2008 and not sure exactly what
13 went on, why is it that Kim Brown has already
14 decided that you all are going to take a position
15 to disagree with the ATSDR findings?

16 MS. SILVERSTEIN: Objection.

17 THE DEPONENT: We had -- you know, as
18 it says in my e-mail, we were concerned -- we had
19 concerns, especially about the uncertainties
20 related to the model, and we wanted to express
21 those clearly to ATSDR.

22
23 BY MR. DEAN:

24 Q. Yeah.

25 But she -- in the March 1, 2008,

1 e-mail at 4:02 in the afternoon, Kelly says she
2 doesn't feel comfortable stating the concerns of
3 your group, since we are just getting involved
4 much later in the game.

5 That means she didn't have all the
6 information. Right?

7 MS. SILVERSTEIN: Objection.

8 THE DEPONENT: Well, I mean, I think
9 it means, you know, what she says, you know, just
10 face value.

11 You know, there was a meeting and,
12 you know, we had a series of meetings with ATSDR
13 over time, but at this one, Kim was not
14 comfortable expressing concerns yet because we
15 didn't have a position to present -- that was in a
16 presentable shape.

17 So I think, you know, what she's
18 saying is, let's figure out where we stand and go
19 from there.

20
21 BY MR. DEAN:

22 Q. Well, flip to the previous page,
23 Page 653.

24 A. Okay.

25 Q. And look at your e-mail at the bottom

1 and read it into the record for me at April the
2 2nd, a couple of days later, 2008, at 3:26.

3 A. "Please find attached my initial
4 impressions of the ATSDR water modeling. Our
5 intent is to keep this internal to Navy and Marine
6 Corps for now and to use it to brief our
7 management. Please don't share this version with
8 others. If it ever goes outside, we'll want to
9 soften the wording. I wasn't trying to be too
10 diplomatic for now. Your input, additions,
11 corrections, et cetera, would be most welcome. I
12 did not address the uncertainties arising from
13 karst geology, but perhaps that is worth
14 mentioning. Also, Peter, I know you have concerns
15 about the groundwater flow calibrations,
16 et cetera, so feel free to add if you think
17 appropriate. Please comment by COB tomorrow,
18 April 23rd, so I can send the final to Kim on
19 Friday. Best regards, Dan."

20 Q. So where are your attached initial
21 impressions of the ATSDR water model?

22 A. Well, it sounds like they weren't
23 printed out for the hard copy that you got. More
24 than that, I can't say.

25 Q. Is it possible that they are in that

1 Camp Lejeune folder on your laptop?

2 A. Yes, it's possible.

3 Q. Again, how about flipping forward to
4 page 669 in this collection.

5 A. 669. Okay.

6 Q. Do you see that agenda?

7 A. I do.

8 Q. Do you see it's dated March 26, 2008?

9 A. I do.

10 Q. Four days before your e-mail of
11 March 31st where you said, "We had our meeting
12 with ATSDR last week."

13 And you have -- your notes, all of
14 this stuff is packaged, stapled together, in
15 conjunction with that meeting. Right?

16 A. I don't know. I mean, I don't know
17 what you got.

18 Q. Well, take a look at page 673.

19 A. Well, I'm talking about stapled
20 together.

21 Q. Yeah.

22 A. Well, I see the dates in front of me,
23 and they certainly seem related to me.

24 But, again, this is all coming out of
25 context. I haven't had time to look at any of

1 this and try to figure it out. So, you know, I'm
2 just kind of --

3 Q. I understand.

4 A. And I'm not trying to dispute
5 anything you're saying. I just -- I can't verify
6 it. That's all I'm trying to get across.

7 Q. Look at 681.

8 This is part of the meeting minutes
9 section for that March meeting.

10 A. Okay.

11 Q. Do you see a section there in that
12 bullet point under Uncertainty? There was a
13 discussion and recognition of uncertainties in the
14 water modeling project.

15 If you read that first bullet point
16 there, you see how Davis is commenting about his
17 two biggest sources of uncertainty.

18 Do you see that?

19 A. Yes.

20 Q. And Robert Faye indicated that most
21 of the uncertainty in [sic] when sources began is
22 associated with the BTEX sources.

23 Which is the underground storage tank
24 areas. Right?

25 A. I see that, yes.

1 Q. And are you aware that ultimately,
2 although he may have not had it at the time,
3 ultimately Bob Faye and ATSDR obtained those
4 underwater storage tank data from Scott Williams?

5 A. I mean, I don't doubt it. I just --
6 I don't -- I'm not aware of that.

7 Q. Okay. And then there's a bullet
8 point by Mr. Pommerenk asking about the validity
9 of the model, and he thinks, quote, there is no
10 way to determine the model can predict what
11 happened before 1982 because no data is available.

12 Do you see that?

13 A. I do.

14 Q. So the whole premise, again, of the
15 concern with model validation is the fact that
16 they're very limited to one set of data.

17 A. The concern is there was no data for
18 model validation, so the model was not validated.

19 Q. Okay. And if you look -- go back to
20 page 653.

21 The very -- at the beginning. It's
22 about four pages in. It's the last e-mail I want
23 to talk to you on this exhibit.

24 A. 653?

25 Q. Yes, sir.

1 A. Okay.

2 Q. So page 1 of the original e-mail.

3 A. Okay.

4 Q. Tell me when you get there.

5 A. Okay. I'm there.

6 Q. All right. The next day you send a
7 follow-up e-mail on April 3, 2008, 10:52 a.m.

8 Do you see that?

9 A. Yes. I do.

10 Q. And it says, "All, I've been looking
11 through the expert peer review panel report for
12 2005. (Peter, saw your name as one of the
13 reviewers.) The review came before the modeling
14 work that was discussed last week. Thus, the
15 review can't be considered a response to the 2008
16 water modeling as I have been thinking
17 previously."

18 Do you see that?

19 A. Yes.

20 Q. "A number of concerns were raised in
21 the review, and I wonder how they're addressed.
22 Here are a few interesting ones. No. 1" --

23 Well, it says page 18.

24 -- "ATSDR acknowledged that a lack of
25 historical data exists for the contaminant source,

1 groundwater pumpage and levels, and water
2 distribution system operations."

3 Do you see that?

4 A. Yep.

5 Q. Is that maybe a reference to what you
6 told me earlier, that you thought there had been a
7 recognition of limitation on available data?

8 A. I don't think this pertains to what I
9 was saying earlier.

10 What I said earlier was, you know,
11 ATSDR, you know, acknowledged that there was no
12 data available for model validation, and that they
13 did not validate the model and that
14 acknowledgement came later. That's not part of
15 this 2005 document.

16 Q. You're thinking that's something
17 after 2008?

18 A. Yes.

19 This was part of the ongoing meetings
20 and discussions we were having with ATSDR.

21 Q. And then the end of that little
22 section, it says, "I'm wondering if ATSDR ever
23 really got enough data."

24 Do you see that?

25 A. I do.

1 Q. If you go down a couple more lines.
2 It says, page 23, "Dr. Clark recommended
3 developing an independent data set to validate
4 projections in addition to parameter estimation.
5 (At our meeting, ATSDR said they did not have
6 enough data for model validation.)"

7 Do you see that?

8 A. I do.

9 Q. So who was Dr. Clark?

10 A. You know, it looks like he was one of
11 the reviewers for the expert peer review panel
12 report from 2005.

13 Q. Okay.

14 And evidently, at this meeting you're
15 making reference to, which was probably the
16 March 26th meeting that's recorded in the meeting
17 minutes attached to this exhibit, that in that
18 meeting, ATSDR said they did not have enough data
19 for model validation at that time.

20 So sort of what you're saying?

21 A. Well, I'm clearly saying that at our
22 meeting, ATSDR said they did not have enough data
23 for model validation.

24 I mean -- and I'll take your word for
25 it, that that could have been the March meeting.

1 But like I say, you know, I can't put together
2 timelines and meetings. I can't do it with the
3 information in front of me, but I don't dispute it
4 either.

5 Q. But as you sit there today, you're
6 not aware that -- your understanding is they were
7 only utilizing one set of data for the Tarawa
8 Terrace model?

9 MS. SILVERSTEIN: Objection.

10 THE DEPONENT: Yeah.

11 I mean, these questions that I had
12 became very clear fairly quickly.

13 And, you know, it is clear that ATSDR
14 only had real-world data in the 1980s, and they
15 used all of it for calibration, and they had no
16 data leftover for model validation. That became
17 very clear.

18 I did have questions at first,
19 because I just didn't know yet. But that became
20 clear, and ATSDR does not dispute that.

21
22 BY MR. DEAN:

23 Q. Okay. Now, the last question about
24 this, there is a report. It's Bates-stamped 657.
25 It's behind the e-mail. 657.

1 A. What is that -- oh, page 657.

2 I've got you. Got you. I'm getting
3 there.

4 Okay. Yes.

5 Q. Now, this is from Dr. Pommerenk to
6 Scott Williams, dated April 2, 2008, and it says,
7 "Draft comments on Tarawa Terrace, Reports Chapter
8 A and C."

9 Do you see that?

10 A. I do.

11 Q. This is Pommerenk's comments, not the
12 ones that you were referring to in your e-mail?

13 A. Which e-mail?

14 I mean, this is --

15 Q. On page 653. On page 653.

16 On page 653 you say, "Please find
17 attached my initial impression."

18 A. Yeah. Yeah. Okay. Yeah, no.

19 Q. My question is: Is that something
20 different than this attachment?

21 A. Correct.

22 This is -- yes. This is clearly
23 Dr. Pommerenk's memo. It's not mine.

24 Q. Okay. Yeah.

25 And have you read his memo

1 historically?

2 A. Yeah. I read it in 2008.

3 Q. Okay. As you sit there today, do you
4 remember anything, you know, an earth-shattering
5 position in this paper that you disagreed with?

6 A. You know, I don't remember. That's
7 16 years ago, so.

8 Q. Let's see.

9 At any time did the DoD, Department
10 of Navy, NAVFAC, or the Marine Corps, to your
11 knowledge, try to put together a workshop or a
12 work group to address the issues related to model
13 calibration and uncertainty?

14 MS. SILVERSTEIN: Objection.

15 THE DEPONENT: Certainly, might have.

16 We had a lot of meetings and, you
17 know, that could have been one of them.

18 I do not remember specifically.

19
20 BY MR. DEAN:

21 Q. Well, there was a complaint that
22 there was a lack of model validation and a lack of
23 data to validate the model.

24 I'm just asking you, as you sit there
25 today, are you aware of a single meeting that the

1 Department of the Navy invited ATSDR into to have
2 a work session to address that issue and resolve
3 it?

4 A. Well, I just know we addressed that
5 issue at numerous meetings, and it's not a
6 complaint. It's just an observation that everyone
7 agrees with, that there was only enough data to
8 calibrate the model, and there was no more data to
9 validate it. So the model was not validated.
10 That's just an observation.

11 Q. Well, let me ask you this: If a
12 model is calibrated, can it be used to reconstruct
13 historical values?

14 A. Not in any scientifically valid way.

15 Q. What about predict future values?

16 A. Well, you know, the ATSDR model was
17 intended to reconstruct past concentrations, but
18 in general, groundwater modeling can be used very
19 effectively to predict future concentrations
20 because you can validate the model at any point,
21 you know.

22 As time goes on, you can take
23 real-world data and validate the model against it.
24 The issue with historical concentrations is, you
25 know, if you don't have data to validate the

1 model, you're never going to have any because you
2 can't go back into the past and take samples.

3 Q. Well, it had to be validated with
4 additional data in order to -- in order for it to
5 be scientifically sound. Is that what you're
6 saying?

7 A. Yes. That's the approach.

8 Because during model calibration, you
9 adjust the input parameters to match the
10 calibration data that you have as best as you can.
11 That's a standard practice.

12 But it's also standard, and it's
13 absolutely essential to fix those parameters after
14 calibration and not adjust them further and do
15 your model validation on a separate data set, and
16 that way you compare how does the calibrated model
17 match up to the real-world data, and that's how
18 you get model accuracy.

19 And for a model to be useful, it
20 needs to accurately represent the real world, you
21 know. Otherwise, it's irrelevant.

22 Q. All right. Are you familiar with the
23 U.S. Geological Survey modeling of the
24 Jacksonville Naval Air Station 1000?

25 A. Yes.

1 Q. Do you have any criticisms of that
2 modeling world?

3 A. No. You know, not that I recall.

4 Because, you know, that model was
5 used for planning purposes, you know, going into
6 the future.

7 And, you know, as I've said, and
8 certainly, you know, working at Jacksonville, we
9 were -- we were always taking a lot of samples
10 and, you know, we could always compare model
11 predictions with real-world samples. We were not
12 relying solely on the model to make any kind of
13 decisions.

14 Q. Let me ask you this: Did you ever do
15 a comparison -- sit down at your desk or wherever
16 and do -- look at what was done in Jacksonville
17 and compare it to what was done at Tarawa Terrace?

18 A. Well, I -- you know, I worked on both
19 projects. So, you know.

20 But as far as sitting down and
21 writing up a comparison, I did not. But, you
22 know, the comparison was clear in my mind, as I've
23 stated.

24 Q. Did they have a secondary set of data
25 with Jacksonville Naval Air Station and that's

1 what you're using to say that that was done
2 properly?

3 A. You know what? I'll just try to say
4 again what I said, you know.

5 At Jacksonville, we were not relying
6 solely on the model to make decisions. The model
7 was used as a planning tool. And, you know, as
8 part of the restoration program, we were regularly
9 taking real-world samples. And that, in
10 conjunction with the model, is how we planned our
11 approach, you know. It's -- and that -- that is
12 common enough, you know.

13 You -- sometimes the model helps you
14 with your planning, but you don't rely on it
15 alone. You have to take real-world samples, and
16 we always do that in the cleanup program. It just
17 happens regularly.

18 Q. And you don't think with respect to
19 Tarawa Terrace they did that?

20 A. Well, I just know they could not have
21 taken any samples from the '70s, '60s, and '50s,
22 because you can't go back in time and do that.

23 It's the historical reconstruction.
24 It's those years that are at issue.

25 Q. If -- if Tarawa Terrace's model had

1 been verified with a second independent set of
2 data, what would your position be?

3 A. I mean, first of all, it was not
4 verified. It was not validated with a second set
5 of data.

6 And, you know, if it were, my
7 position would depend on what -- what's it all
8 look like. I mean, there's just -- there's just
9 no --

10 Q. (Talking over each other.)

11 If there were, in fact, a second
12 independent set of data that was utilized
13 following these March meetings to which you were
14 not aware of, where the model was validated, you
15 still wouldn't change your opinion. Is that what
16 you're telling me?

17 MS. SILVERSTEIN: Objection. That's
18 misstating his testimony.

19 THE DEPONENT: Yeah.

20 I'm just saying, you're not giving
21 enough information for me to say one way or
22 another.

23 I will say that if -- let's say they
24 found additional data for the '90s, which maybe
25 they did. I don't know. Maybe that's what you're

1 getting at.

2 If they validated the model against
3 data from the '90s, that would not change my
4 position on the uncertainty associated with what's
5 really going on in '70s, the '60s, and the '50s.

6 It's not the '90s that are at issue.
7 It's the '70s, the '60s, and the '50s.

8 (Whereupon, Waddill Deposition
9 Exhibit 7, PowerPoint Slides, DON Perspective on
10 ATSDR Water Modeling at Camp Lejeune, January
11 2011, Contains Information Subject to Protective
12 Order: Do Not Disclose to Unauthorized Persons,
13 CLJA_NAVY_WADDILL_HC_0000000363-374, was marked
14 for identification.)

15
16 BY MR. DEAN:

17 Q. All right. Let's go to Exhibit --
18 pull up Exhibit 7. Let me know when you've got it
19 up.

20 A. Okay. I'm up.

21 Q. This appears to me --

22 Well, for the record, it's
23 Bates-stamped 363 for this series of exhibits.
24 It's 363 through 374. The first four or five
25 pages is a PowerPoint.

1 Do you see that?

2 A. Yes.

3 Q. Did you create this PowerPoint?

4 A. Yes.

5 Q. And it's dated January of 2011?

6 A. Correct.

7 Q. Can you tell me what the -- so you
8 told me earlier in your depo you moved -- or your
9 concentration sort of moved to munitions in '11.
10 I don't know if this is about that same timeframe
11 or before it.

12 Do you remember how this came about,
13 that you were asked to prepare this PowerPoint?

14 A. No, I don't.

15 But the way we -- the way we work is,
16 you know, even if I had moved to focus on
17 munitions, you know, I was still the subject
18 matter expert for the Camp Lejeune groundwater
19 modeling. So I still would have been the one that
20 people would come to for this type of thing,
21 and -- yeah.

22 Q. But you don't remember what the
23 purpose of this was as far as --

24 A. No. No, I don't.

25 Q. -- why you prepared it?

1 Throughout this PowerPoint, in the
2 blue box at the bottom -- not every slide, but
3 most of the slides -- you point to the NRC as
4 supporting citation for whatever proposition might
5 be on the -- on that particular slide.

6 Do you see that?

7 A. Yes.

8 Q. And that's because with respect to
9 the NRC's criticisms of ATSDR Tarawa Terrace's
10 water modeling, you agree with all of those
11 criticisms. Right?

12 A. You're asking if I agree with
13 everything in the blue boxes?

14 Q. No.

15 I'm asking you, do you know what all
16 of the criticisms were by NRC as it pertains to
17 ATSDR Tarawa Terrace's water modeling?

18 And I'm just simply asking you, do
19 you agree with all of them, or is there some you
20 take exception with?

21 A. I mean, I don't know that I recall
22 all of their criticisms or all of their
23 statements, but certainly the ones -- you know,
24 the ones here, I agree with.

25 I mean, they're stating the same

1 concerns that I had stated. And I -- you know, I
2 agree with that, absolutely.

3 Q. Okay. And, that's fair.

4 I guess a different way to ask it is,
5 nothing comes to mind, as you sit there, where you
6 disagreed with a position by NRC in their 2009
7 report?

8 A. If you're limiting it to just the
9 water modeling, that is correct. Nothing comes to
10 mind.

11 But there was a lot more in that
12 report other than just the water modeling, and for
13 that, I wouldn't have an opinion because I'm not
14 an expert.

15 Q. Okay. Well, that was my second
16 question on the topic was to -- you know, NRC has
17 a lot of criticisms of ATSDR, and I was going to
18 ask if you had any position or whether you agree
19 with NRC or take exception with any of their
20 positions?

21 A. I mean, I don't have any position as
22 a knowledgeable person on epidemiological studies.

23 I did -- I do recall reviewing one of
24 their epidemiological studies, and as a layperson,
25 you know, I have opinions, but I would not say

1 that they're of any value. It's just -- you know.

2 Q. So with respect to criticisms, you're
3 sticking with those that you would agree with the
4 NRC as it concerns water modeling?

5 A. Yes.

6 I mean, my position as an expert is
7 limited to the water modeling, and it doesn't get
8 into the other issues that the NRC got into.

9 (Whereupon, Waddill Deposition
10 Exhibit 8, Camp Lejeune Water Model, Hadnot Point,
11 3/19/2013, Contains Information Subject to
12 Protective Order: Do Not Disclose to Unauthorized
13 Persons, CLJA_NAVY_WADDILL_HC_0000000319-362, was
14 marked for identification.)

15

16 BY MR. DEAN:

17 Q. Okay. Let's go to Exhibit 8. I only
18 have about three or four more. I'm trying to get
19 everybody out of there by 4:00, at the latest.

20 This is Exhibit 8. Let me know when
21 it is there.

22 A. What page?

23 Q. I'm sorry?

24 A. What page are you on?

25 Q. So Exhibit 8 in the exhibit folder,

1 for the record, is Waddill hard copy 319 through
2 362.

3 A. Okay.

4 Q. Got it?

5 A. Yes.

6 Q. Okay. Well, you see, luckily, on
7 this one, you dated it, your notes.

8 Do you see that? March 19, 2013?

9 A. Yes.

10 Q. The first note you have there --
11 well, this is -- Camp Lejeune Water Model, Hadnot
12 Point.

13 So I guess even though you had gone
14 to munitions, you're back in 2013 assisting with
15 some sort of review of the Hadnot Point water
16 model?

17 A. It certainly looks that way.

18 And as I said, my level of
19 involvement did continue, it just was very
20 infrequent. And I'm not sure when it stopped
21 altogether. I just don't remember.

22 Q. Okay. And you agree with me, the NRC
23 did not take a look at the water modeling work and
24 conclusions of ATSDR. It was only Tarawa Terrace.
25 Right?

1 A. Well, they made recommendations for
2 the Hadnot Point water modeling in their 2009
3 report.

4 But as far as I know, they did not
5 look at final reports for Hadnot Point.

6 Q. Okay. Were you ever told there was a
7 possibility of a plan to do that and it was
8 abandoned?

9 A. No.

10 Q. On bullet -- or not bullet point --
11 Item 1 says, "Scott W.," and then it says, "Only
12 issue Mr. S doesn't know about."

13 Do you know what that is -- why you
14 made that note and what that is referring to?

15 A. No.

16 I mean, it's followed with "PCE? Or
17 TCE not showing in wells."

18 So maybe it's related to that. I
19 just don't know. I can't remember.

20 Q. And you don't know who Mr. S is?

21 A. No.

22 I mean, there's -- no, I don't.

23 Scott W. is probably Scott Williams.

24 Q. All right. And then if you turn to
25 page 321.

1 There is a NAVFAC ATSD water modeling
2 brief dated April 13th.

3 A. Yes.

4 Q. Do you see that?

5 A. I do.

6 Q. Did you prepare that PowerPoint?

7 A. Yes.

8 Q. And on page 328, Bates-stamped 328,
9 there's a section or a slide that says, "Bottom
10 Line Up Front."

11 A. On 328?

12 Q. 326.

13 A. 326.

14 Yes. Got it.

15 Q. You see there's a section that you
16 typed out there about uncertainty?

17 Do you see that?

18 A. Yes.

19 Q. You say that ATSDR utilized
20 uncertainty in model precision, but ATSDR did not
21 analyze uncertainty in model accuracy.

22 Do you see that?

23 A. I do.

24 Q. And do you still believe that that's
25 the truth?

1 A. Yes. It is the truth, as far as I
2 know.

3 They never analyzed uncertainty with
4 respect to model accuracy, and it's a very
5 important distinction.

6 Q. Okay. Well, let's go to a different
7 exhibit.

8 And I've already labeled some things,
9 so we'll call this one -- jump ahead a little bit
10 for the record, and call the next exhibit as
11 Exhibit 12, and we'll come back to it.

12 (Whereupon, Waddill Deposition
13 Exhibit 12, Analyses of Groundwater Flow,
14 Contaminant Fate and Transport, and Distribution
15 of Drinking Water at Tarawa Terrace and Vicinity,
16 U.S. Marine Corps Base Camp Lejeune, North
17 Carolina: Historical Reconstruction and
18 Present-Day Conditions; Chapter A: Summary of
19 Findings; ATSDR, Atlanta, Georgia; July 2007;
20 Contains Information Subject to Protective Order:
21 Do Not Disclose to Unauthorized Persons;
22 116 pages, was marked for identification.)

23
24 BY MR. DEAN:

25 Q. If you'll look in there and see

1 Exhibit 12, and let me know when you've got it.

2 A. Got it.

3 Q. And I want you to go to page 852.

4 A. 852.

5 Q. You should be able to scroll, and I
6 know it may take awhile.

7 And at the top of the page it says,
8 "Probable Listing Analysis."

9 A. Okay. Okay. I'm there.

10 Q. So let's read together --

11 Well, let me ask you this: Have you
12 ever read this page?

13 A. I probably did back in the day, yes.

14 Q. Do you know what a "probable listing
15 analysis" is?

16 A. Yes.

17 Q. What is it?

18 A. Basically, it's a sensitivity
19 analysis in which they -- and it's a standard
20 thing to do.

21 For certain input parameters that can
22 be variable or difficult to measure directly, you
23 can allow them, as a modeler, to vary. And, you
24 know, you devise ways of picking a set of input
25 parameters and then you run the model. And so

1 that's the first run.

2 Then you -- you know, you let the
3 parameters vary according to your method and you
4 pick a second set and then you run the model
5 again. That's two.

6 And for Tarawa Terrace, they did it
7 800-and-some times. And so you end up with, you
8 know -- you know, in this case, 840 runs of the
9 model, and then you can do a statistical analysis
10 about how the output compares, you know, what sort
11 of statistical distribution does it form.

12 The important thing to note is that
13 this is all comparing output that comes from the
14 model. There's no comparison to any real-world
15 concentrations.

16 And so that's -- that's it in a
17 nutshell.

18 Q. So you would agree, I guess, then, by
19 that statement that a probable listing analysis is
20 a form of an uncertainty analysis?

21 A. It is.

22 It's -- it gets at how the model
23 output varies within the model world. So it gets
24 at -- you know, it gets at answering, you know,
25 what's the uncertainty with respect to model

1 precision.

2 It does not address the uncertainty
3 with respect to model accuracy, because accuracy
4 requires the model output to be compared against
5 real-world concentrations.

6 Q. A second set of data?

7 A. Correct.

8 Q. So do you see in that first paragraph
9 anything that you -- just jumps out that you
10 disagree with? And we can read it together, if
11 you prefer.

12 A. No. Let me read it.

13 Q. It's that first paragraph.

14 A. Yeah.

15 I think it's basically, you know,
16 describing what I described.

17 And it's -- again, it's all within
18 the model world. There are no comparisons to
19 real-world concentrations. So this -- this gives
20 you uncertainty with respect to model precision
21 and not with respect to how accurately the model
22 captures what's going on in the real world.

23 Q. Do you agree, you know, that a true
24 uncertainty analysis, as you've described it,
25 you're looking for a possible range of

1 concentration at a given historical time?

2 A. I don't really understand what you
3 said, so I cannot agree with it.

4 Q. Okay. So is an uncertainty analysis
5 to look at possible -- to provide with a range so
6 that you -- you're recognizing that maybe it's not
7 this exact level, but there's a range?

8 As a matter of fact, they make
9 reference in the second paragraph there, if you
10 want to take a look at the Monte Carlo analysis.

11 A. Yes.

12 Q. Do you see that?

13 A. Yes.

14 Q. And so what I'm trying to get at is,
15 do you think there might be a misunderstanding
16 between you and what the ATSDR did with respect to
17 their uncertainty analysis in creating this
18 uncertainty analysis and coming up with this
19 possible range of concentrations with that low,
20 medium, and high?

21 A. Yes.

22 I can assure you, there's no
23 misunderstanding.

24 Let me give you an example to
25 illustrate.

1 If you say, "I'm going to shoot
2 arrows at a target," and you can shoot -- you
3 launch 100 arrows and you go and you see where
4 they landed, they might be clustered very close
5 together. They might be spread out somewhat, and
6 that gives you an idea of how precise your
7 shooting is, you know, how one shot compares to
8 another.

9 But what you'd really like to know in
10 addition to that is how accurate are you. Like,
11 your arrows might be very tightly clustered
12 together, but very far away from the bulls-eye.
13 You know, they might miss the target altogether.

14 And so, you know, the point that I'm
15 trying to make is, if you talk about uncertainty,
16 you need to be clear what type of uncertainty it
17 is you're describing.

18 What ATSDR did in this case is
19 uncertainty with respect to model precision.
20 That's how tightly the model runs compared to one
21 another, and they did. They created ranges and
22 all of that.

23 But it's precision, and it has
24 nothing to do with uncertainty with respect to
25 model accuracy, which is how -- how closely does

1 that cluster come to the real world, and that's
2 just unknown because they didn't have data to do
3 that kind of analysis.

4 Q. And if you turn to page 860, so about
5 eight pages forward. You'll see a section there
6 that continues this summary of findings, and you
7 see where they charted those Monte Carlo runs.

8 Do you see that?

9 A. Okay. Page 864 you said?

10 Q. 860. 8-6-0.

11 A. Okay. Okay. I'm there.

12 Q. My question is: Do you see that they
13 graph on that page those Monte Carlo runs, and
14 they come out with -- with a range of
15 concentrations representing 95 percent of those
16 Monte Carlo simulations that you referred to?

17 A. Yes.

18 I'm very familiar with this graph.

19 Q. And you're just saying -- you're
20 saying that is not an uncertainty analysis in your
21 sense of what that meaning is?

22 MS. SILVERSTEIN: Object to form.

23 THE DEPONENT: No. And I'll say it
24 again. I said it a couple of times already.

25 This is an uncertainty analysis with

1 respect to model precision. This tells very
2 clearly how all the various runs of the model
3 compare to each other, but it is not an
4 uncertainty analysis with respect to model
5 accuracy.

6 For example, if you look at January
7 1975, all of the model outputs are clustered, you
8 know, around -- just looking at the graph -- from
9 100 to maybe 50.

10 It's a log scale. The concentration
11 on the left is a log scale, you know.

12 So this tells you how closely the
13 model runs matched up with each other, but what's
14 unknown at this time is what was the real
15 concentration. The real concentration could have
16 been over 1,000. It could have been less than
17 0.1.

18 It's just, you know --

19 And that's the uncertainty analysis
20 with respect to accuracy that's very important.
21 That's the tie to the real world and that's what's
22 missing.

23 Q. Okay. Thank you for that.

24 Let's move in a different area real
25 quick.

1 So the ATSDR water modeling, do you
2 know if it went through a peer review process?

3 A. I don't know what they did. I may
4 have heard at the time. I don't remember.

5 Q. Do you remember that -- anything
6 about the ATSDR being peer-reviewed before,
7 during, and after the studies were completed?

8 A. You know, I don't remember what they
9 did.

10 I mean, I know they had procedures
11 that they follow.

12 Q. Do you remember that the ATSDR peer
13 review activities and peer review work was all
14 made public? It's all there on their website
15 where it is available in the public domain.

16 A. Well, I don't doubt that they did it,
17 then.

18 But you're asking me if I remember,
19 and I just -- I don't remember what they did.

20 Q. I want you to take it as a fact for
21 purposes of my next few questions, that that ATSDR
22 peer review activities and work was made public,
23 was available to you or anyone else at the time
24 should you care to -- you know, if somebody had a
25 need to look at it. Okay?

1 A. Sure. I accept that.

2 Q. Now, what do you know about the
3 NRC's -- do you know whether or not the NRC's 2009
4 paper, was it peer-reviewed?

5 A. I do not know.

6 Q. Well, I'll tell you it was.

7 A. Okay.

8 Q. I want you to accept my word that it
9 was.

10 A. Fair enough.

11 Q. Have you ever seen it?

12 A. Not that I recall, no.

13 (Whereupon, Waddill Deposition
14 Exhibit 9, Various documents with cover sheet
15 being Action Items: Dan & Morris meet, Notes,
16 Contains Information Subject to Protective Order:
17 Do Not Disclose to Unauthorized Persons,
18 CLJA_NAVY_WADDILL_HC_0000000153-220, was marked
19 for identification.)

20

21 BY MR. DEAN:

22 Q. Turn to Exhibit No. 9. I've got it
23 in the folder for you.

24 MS. SILVERSTEIN: Kevin, I see what's
25 marked as Exhibit 11. Is that Exhibit 9?

1 MR. DEAN: Well, let's see. Did I
2 put the wrong one in there?

3 That's possible. We'll leave that
4 one in there. I'm going to put 11 -- I mean, 9 in
5 there.

6 Give it just a second to refresh. It
7 should be in there now.

8 MS. SILVERSTEIN: Yeah. I see it.

9

10 BY MR. DEAN:

11 Q. Have you got it up, Dr. Waddill?

12 A. Not yet.

13 Q. Okay.

14 MS. SILVERSTEIN: Is this 153?

15 MR. DEAN: Yes, ma'am.

16 MS. SILVERSTEIN: Great.

17 THE DEPONENT: Okay. Yes.

18

19 BY MR. DEAN:

20 Q. Is this the Bates-stamped one --

21 MS. SILVERSTEIN: Kevin, you're
22 breaking up.

23

24 BY MR. DEAN:

25 Q. Exhibit 9, page 153?

1 Is that your handwriting on page 153?

2 A. Yes.

3 Q. If you look at the bottom, you've got
4 a note about NRC peer review.

5 Do you see that?

6 A. Yes.

7 Q. And you say -- you say the word,
8 "transparent, but cost and time."

9 What did you mean by that?

10 A. You know, I don't know. I don't --
11 you know, I don't remember this.

12 I mean, it may be, you know,
13 considering the NRC review of the ATSDR work to be
14 a peer review. I don't know.

15 Q. Well, let me see if you agree.

16 If you're going to judge the peer
17 review process for ATSDR, the peer review process
18 that was done -- and you could review both of
19 them --

20 A. You're breaking up.

21 THE VIDEOGRAPHER: Going off the
22 record at 3:15 p.m.

23 (Whereupon, a recess was taken from
24 3:15 p.m. to 3:20 p.m. EST.)

25

1 THE VIDEOGRAPHER: Back on the record
2 at 3:20 p.m.

3
4 BY MR. DEAN:

5 Q. Okay. So let me know if you have any
6 difficulty hearing me, and I'll try to -- but I
7 hope this is better.

8 A. So far, so good.

9 Q. All right. So Exhibit 9 is where we
10 are, and I was having you try to remember and
11 reflect on the note, No. 2, that's on the bottom
12 of page 153.

13 Do you see that?

14 A. 153, yes.

15 Q. The very -- okay.

16 And my point that I was asking you to
17 comment on was, if you're going to evaluate the
18 transparency of the peer review process and
19 compare two, like in this case, NRC and ATSDR, you
20 would need to see both of their peer-reviewed
21 reviews and process documents. Right?

22 MS. SILVERSTEIN: Object to form.

23 THE DEPONENT: Yeah.

24 I mean, it's a hypothetical. I've
25 never compared or was aware of their peer review

1 processes, at least not that I call.

2
3 BY MR. DEAN:

4 Q. You don't know how -- let me ask you
5 this: You don't know how the committee was formed
6 that made up the NRC committee, do you?

7 A. That is correct. I do not know how
8 that was formed.

9 Q. You don't know who had input, and you
10 don't know what communications took place for the
11 selection of those members?

12 MS. SILVERSTEIN: Object to form.

13 THE DEPONENT: I do not.

14
15 BY MR. DEAN:

16 Q. You don't know if any of those
17 committee members had any sort of conflicts of
18 interest that were not considered at the time, do
19 you?

20 A. No.

21 That would follow from what I've been
22 saying about not being aware of how that process
23 occurred.

24 Q. Okay. You don't know whether or
25 not -- and you don't know how the debate took

1 place with regard to the final drafting of the
2 report, because neither you nor I have seen those
3 drafts. Right?

4 A. Well, I don't know about you, but I
5 have not seen any --

6 You're talking about draft NRC
7 reports, I believe. I saw the final.

8 Q. That's all I've seen.

9 You haven't seen any of the work done
10 by the peer review committee that's referenced in
11 the NRC report. You haven't seen any of those
12 peer review activities or e-mails or comments,
13 have you?

14 A. I mean, not that I recall.

15 Q. So you don't know whether or not the
16 NRC peer review was actually transparent or not,
17 do you?

18 A. I don't know anything about the NRC
19 peer review.

20 Q. All right. Now, go to the next page,
21 155, of the same Exhibit 9.

22 A. Okay.

23 Q. You have a note there under Item 6
24 that says, "Basic instruction is that water
25 modeling will provide exposure concentrations

1 monthly to support these health steps."

2 Do you see that?

3 A. Yes.

4 Q. And then you say, "But we now agree
5 that Hadnot Point modeling may be a no-go."

6 Why did you say it's a no-go?

7 A. You know, I don't know.

8 These are -- these are my notes from
9 some meeting. And, you know, I assume I'm just
10 taking notes on what people are saying, you know.

11 I know there were concerns about how
12 to follow up with Tarawa Terrace, you know, but I
13 don't remember.

14 But, I mean, regardless, they -- they
15 did do modeling at Hadnot Point.

16 Q. And then in Item No. 7 you state,
17 "There's a public perception that we are trying to
18 kill the modeling at Hadnot Point."

19 Do you see that?

20 A. Again, these are my notes.

21 Probably, somebody at the meeting was
22 saying something to that effect.

23 Q. Were you and your team and others at
24 NAVFAC trying to kill the water modeling at Hadnot
25 Point?

1 A. Absolutely not.

2 I mean, we -- we supported studies at
3 Camp Lejeune, the Navy supported studies,
4 countless studies, and we continued to support all
5 scientific studies that could be helpful to our
6 service members and their families.

7 Q. All right. Go to the next page, 159.

8 It's a typed-up page, "Department of
9 the Navy statement for the expert panel assessing
10 ATSDR's methods and analysis."

11 Do you see that?

12 A. Yes.

13 Q. It looks like some prepared statement
14 that you sort of read to the panel. Is that
15 right?

16 A. I believe that's correct, yes.

17 Q. And then if you turn to page 209 --

18 A. 209?

19 Q. Yes. Bates-stamped page 209.

20 A. Huh. I'm on 161.

21 Q. It doesn't go to 209?

22 A. Well, I'm in the 160s. Do I go way
23 down?

24 Q. Yeah. All the way to 209.

25 A. Okay. Okay.

1 Q. I'm sorry, but I'm not being critical
2 of anybody, but the way this document was
3 produced, it had this many pages together. So I
4 don't know if it was a file folder or stapled
5 together, but it was one document when I received
6 it, so I tried to keep it like I received it.

7 A. Okay. 209. Okay.

8 Q. So this is a draft response, I guess,
9 from ATSDR back to the Navy, and you're commenting
10 there on -- in that first paragraph where they're
11 saying this historical reconstruction was
12 successfully applied to Tarawa Terrace, and then
13 you've got some notes below it.

14 Do you see that?

15 A. I do.

16 Q. So I just want to make sure that I
17 read this correctly.

18 You've got a line drawn through the
19 word "successfully," and you say, "How has success
20 been judged?"

21 Do you see that?

22 A. I do.

23 Q. Can you read what you said under
24 there?

25 A. "Given -- given the uncertainty

1 associated with the reconstructed concentrations,
2 the failure to meet calibration targets, and the
3 lack of real data -- for example, no validation --
4 are the historically reconstructed concentrations
5 actually useful for the EPI study?"

6 Q. And, of course, your answer to that
7 question is no?

8 A. Well, I do not answer that question
9 here. I just raised the question, and I think
10 it's a fair one.

11 You know, ultimately, there were
12 quite a few of us that felt like those monthly
13 concentrations were not accurate enough to support
14 the epidemiological studies.

15 Q. Well, would you defer to Dr. Bove as
16 the lead epidemiologist, the study that he had
17 authored, '17 and '18, to comment on whether or
18 not those monthly concentrations were useful for
19 his EPI studies?

20 A. You're asking would I defer?

21 Q. Yes.

22 A. No, I would not defer, because the
23 monthly concentrations come from the water
24 modeling, and his expertise is in epidemiology,
25 just like --

1 So, you know, it's -- it's my
2 evaluation and certainly the NRC's evaluation that
3 those monthly concentrations were not accurate
4 enough or valid to be of use in the EPI studies.

5 I mean, the NRC went further to say
6 that to use them could be harmful, because it
7 could give a misleading perception that these
8 erroneous values are, you know, correctly
9 assigning exposure levels. In the words they
10 used, it could, you know, erroneously implicate or
11 exonerate exposure levels. And so that's --
12 that's a serious concern.

13 Q. What if -- you recognize that Morris
14 Maslia who did the water modeling at Tarawa
15 Terrace is an internal employee to ATSDR, as well
16 as Dr. Bove. Right?

17 A. I believe that's correct.

18 Q. What if Dr. Bove was aware of the
19 validation of this model that made him feel
20 comfortable that the monthly concentration data
21 was sufficiently accurate for his use, would you
22 in that case defer to Dr. Bove?

23 MS. SILVERSTEIN: Objection.

24 THE DEPONENT: I mean, I'm just
25 saying that the concern with the monthly

1 concentrations is a water modeling concern. And
2 so, you know, the experts with respect to water
3 modeling, it would be inappropriate to defer those
4 concerns to an epidemiologist.

5 (Whereupon, Waddill Deposition
6 Exhibit 10, Various e-mails, the first document
7 being an e-mail from Dan W. Waddill to Mary Ann
8 Simmons, Scott R. Williams, Mario O. Dumenigo, Kim
9 P. Brown, Brian P. Harrison, Wanda Holmes, Edward
10 J. Newbaker, Christopher D. Gamache, Christopher
11 P. Rennix, and Uzo Chukwuma; Subject: RE: Major
12 After Action from DON/ATSDR Meeting of 7/16/09;
13 signed by dan.waddill@navy.mil; July 17, 2009;
14 6:07 p.m.; Contains Information Subject to
15 Protective Order: Do Not Disclose to Unauthorized
16 Persons; CLJA_NAVY_WADDILL_HC_0000000909-974, was
17 marked for identification.)

18
19 BY MR. DEAN:

20 Q. Let's go to Exhibit 10, and we're
21 getting close to being done.

22 And just let me know when it's there.

23 A. Thank you. I'm here.

24 Q. Now, Exhibit 10 is a series of
25 Waddill hard copy documents beginning Bates stamp

1 909 through 973.

2 A. Okay.

3 Q. Do you recognize the e-mail that's on
4 page 909, sent by yourself on July 17th to Mary
5 Simmons, Scott Williams, and others?

6 A. Yes. I see it here.

7 Q. Now, do you know when the NRC report
8 was issued?

9 A. It's a 2009 date. I don't recall
10 exactly.

11 Q. Let me see if I can find it.

12 Well, I don't have the exact date on
13 the summary -- public summary.

14 Do -- do you remember that it was in
15 the summer of 2009? In or about -- it's about the
16 July -- June or July 2009?

17 A. I do not remember.

18 Q. Let me scratch that and ask it again.

19 Yeah. Let me scratch that and ask
20 you a new question.

21 Do you believe that the NRC report
22 had already been issued when you issued -- when
23 you wrote this e-mail?

24 A. Yes. Yes.

25 We had seen the report. There was a

1 prepublication copy and then the final came out.

2 Q. So it's possible the final came out
3 after you wrote this e-mail and had been reviewing
4 the draft?

5 A. Well, it wasn't a draft. It was a
6 prepublication copy. So it was --

7 Q. Yes. I'm sorry.

8 A. Yeah.

9 I mean -- and I guess it's possible,
10 but I just don't know.

11 Q. The prepublication copy was made
12 available -- yeah. It was made available to the
13 Navy and ATSDR and everyone to give them a
14 heads-up before its release to the public. I'm
15 not suggesting that there was anything wrong with
16 that, but that's how it worked. Right?

17 A. Yes. That's what I recall.

18 We had a prepublication copy, and the
19 final came at some point thereafter.

20 Q. And then you say, "Here are my
21 thoughts on NRC and the water modeling budget and
22 schedule."

23 A. Yes.

24 Q. Do you see that?

25 A. I do.

1 Q. And then at the end of that first
2 paragraph, "The NRC committee for Camp Lejeune was
3 comprised of world-class scientists, and given the
4 NRC mission, our motive and decisions are readily
5 defended and supported if we follow the NRC
6 recommendations."

7 Is that what you wrote?

8 A. Yes.

9 Q. Actually, let's go to the end of the
10 e-mail trail, page 913.

11 A. Okay.

12 Q. Now, do you -- while you're getting
13 to page 913, do you remember that there were
14 annual budgeting meetings where there were funding
15 issues that would come up from time to time in the
16 different stages of ATSDR work and the NRC
17 activities or the NRC report and review was a -- a
18 tool or a resource -- a resource that was
19 available to help guide those budget discussions?

20 MS. SILVERSTEIN: Object to form.

21 THE DEPONENT: I mean, I -- I
22 interpreted the NRC report to be a guide to
23 scientific approaches, not to budgeting.

24 (Interruption by alarm.)

25 MR. DEAN: Hold on. I'm sorry.

1 Tornado warning. If you all see me
2 disappear in a minute, you'll know where I went.

3 THE DEPONENT: I mean, I am aware
4 that there were budget discussions, and I may have
5 been at meetings when the budget was discussed,
6 but, you know, that was -- that was not my area.
7 So I would have been tuning out those discussions.

8
9 BY MR. DEAN:

10 Q. So if you look at the bottom of
11 page 913, there's an e-mail from Kim Brown to
12 yourself and others. The subject is "Major --
13 Major Act or Actions from the DON/ATSDR meeting of
14 July 16, 2009."

15 A. Okay.

16 Q. And it says at the top of the
17 page 915 where that e-mail continues, "We had a
18 few action items from our meeting today, but the
19 more immediate one was to provide a decision back
20 to ATSDR if we're going to fund all the efforts
21 for Option 1 of FY09. ATSDR provided some
22 enlightening messages in their concerns with the
23 NRC report. In order to provide some feedback on
24 any reservations with funding of any portions of
25 the ATSDR activities, I need to hear complete

1 justification from everyone based on sound --
2 sound scientific reasoning. Dan provided some
3 justification for the water modeling, and Chris
4 provided some justification for the mortality
5 study. If everyone can provide their
6 justification to me, I will consolidate and
7 provide to ATSDR once we are back early next week.
8 Please respond to me by close of business 21
9 July."

10 Do you see that?

11 A. I do.

12 Q. And then if you come back to the
13 previous page, page 913, and go up to the e-mail
14 before that, there's an e-mail from Mario
15 Dumenigo, D-u-m-e-n-i-g-o.

16 Do you see that?

17 A. Yes. Yes.

18 Q. To you and others. He's with NAVFAC.
19 Do you know who he is?

20 A. Yes.

21 Q. Okay. He says, "Well, we may have to
22 see what they provide to justify the additional
23 work, cost increase, for the water modeling and
24 decide if we want to pay the increase this year or
25 make them wait until next year. It is clear that

1 they want to keep as much of the funding issued as
2 possible. They said they want to proceed with the
3 mortality study as originally planned and without
4 changing the scope, regardless of expert panel's
5 findings. If you disagree and want to see what --
6 their official rationale for this decision, we
7 need the justification to support our actions for
8 not funding."

9 Do you see that?

10 A. I do.

11 Q. So the Navy and NAVFAC was going to
12 utilize the NRC study to either stop funding for
13 that year or no funding for the following year or
14 curtail their spending and reduce what they were
15 doing.

16 Is that fair?

17 MS. SILVERSTEIN: Objection.

18 THE DEPONENT: No. I will say that's
19 not fair.

20 The situation that's being shown here
21 is that, you know, the Navy was willing at the
22 time, and always was and still is, willing to fund
23 scientifically defensible work that will be a
24 benefit to our sailors, our Marine Corps
25 personnel, and their families.

1 And, you know, the NRC was
2 questioning the scientific value of some of that,
3 and so what this reflects is Navy leadership
4 trying to figure out, you know, how do we fund it
5 and when, in order to best support our people.

6 That's what this is.

7
8 BY MR. DEAN:

9 Q. Well, it seems to me, if you read the
10 e-mail, historically what Mr. Dumenigo said, we
11 need to -- "We need a justification to support our
12 actions for not funding this fiscal year."

13 How else can you read that except
14 Mr. Dumenigo, at least in his mind, is seeking the
15 NRC's justification for not funding any more ATSDR
16 activity as of July 2009?

17 MS. SILVERSTEIN: Objection.

18
19 BY MR. DEAN:

20 Q. That's what it says, isn't it?

21 A. He's just saying --

22 Okay. ATSDR told them they "want to
23 proceed with the mortality study as originally
24 planned and without changing the scope, regardless
25 of expert panel's findings. If you disagree and

1 want to see what -- their official rational --
2 rationale for this decision, we need the
3 justification to support our actions if we're not
4 funding this FY."

5 So, you know, all he's saying is that
6 if we -- if we disagree with the ATSDR proposal,
7 then we would have to justify that.

8 Q. And then -- let's see.

9 Whose comments are these, page 913,
10 912?

11 912.

12 And then on page 911, do you see an
13 e-mail from Mary Ann Simmons in this chain,
14 Friday, July 17, 2009, at 3:53? Do you see that?

15 A. Yes.

16 Q. She says, "Agree with all the below,
17 and here's my 2 cents. We have been -- we have
18 been saying that we will, quote, use the results
19 of the National Academy of Science's review to
20 respond to future Camp Lejeune historic drinking
21 water initiatives."

22 Did I read that correctly?

23 A. Yes.

24 Q. So there was a predetermined decision
25 that this group, including you, would use the

1 results of National Academy of Science's review to
2 refine or reduce future Camp Lejeune historic
3 drinking water studies. Is that right?

4 MS. SILVERSTEIN: Objection. That's
5 misstating the testimony.

6 THE DEPONENT: Yeah. I mean, as I've
7 said --

8
9 BY MR. DEAN:

10 Q. Well, I think --

11 Let me ask you this, Mr. -- Mr. --
12 Dr. Waddill: Did I read the context of what that
13 first paragraph said about what you and the others
14 in NAVFAC were doing and going to use this report
15 for?

16 A. I -- I don't believe I follow.

17 You know, as I've said, we -- we were
18 perfectly willing to fund and support any
19 scientifically defensible studies, but if NRC came
20 out with concerns about the studies, as they did,
21 then, you know, that would be factored into
22 decisionmaking, which is appropriate because
23 that's the purpose of having the NRC.

24 A couple of other things to note. I
25 see below Congress directed us to have the NRC do

1 this report. So that's the answer to your
2 question, you know, where did that come from.
3 Congress directed the Navy to do it, to fund the
4 NRC to do a report.

5 Q. To fund an impartial study by
6 nonbiased scientists. You agree with that.
7 Right?

8 A. Well, you know, it looks like --

9 Q. World-renowned. World-renowned
10 scientists.

11 A. It looks here like Congress --

12 Q. Let me --

13 A. -- directed the Navy to fund the NRC
14 to do their report. And, you know, my
15 understanding certainly is that the NRC is made up
16 of scientists who are doing their best to be
17 unbiased and truthful, and I see no reason to
18 dispute that.

19 Q. Well, then, how do you explain why
20 Ms. Simmons knew that NRC report was going to come
21 out against ATSDR's conclusion? Because that's
22 what she says in this paragraph.

23 A. That is clearly not what she says.

24 Q. I'm going to quote it to you one more
25 time, and then you and I will move on.

1 "We" --

2 And you're a part of this e-mail.

3 Right?

4 A. Yes.

5 Q. "We have been saying that we will use
6 the result" --

7 And she quotes from somewhere.

8 -- "use the results of the National
9 Academy of Science's review to refine future Camp
10 Lejeune historic drinking water initiatives."

11 Did I read that correctly?

12 A. You did read that correctly, and what
13 it means is, that, you know, depending on what the
14 NRC said, we would refine our reproach.

15 It could be that we would fund many
16 more studies than expected. We might spend a lot
17 more money, depending on what the NRC recommended.
18 You know, it goes both ways.

19 Q. Well -- that's right.

20 But what Ms. Simmons wanted to do and
21 your group -- if you keep reading, she says, "Now
22 that the NRC has spoken and provided their expert
23 opinion, seems to me that we have at least a
24 partial path forward, based on their findings."

25 Quote -- or then she says, "Can we

1 pick and choose which recommendation to use or not
2 use? We can, but to me anyway, that makes our
3 lives much more difficult."

4 Do you see that?

5 A. Yes.

6 And I -- you know, I agree with her.
7 Picking and choosing is not -- is not the way to
8 go.

9 And, you know, what she's saying is,
10 before we got the NRC report, we were agreeing to
11 adjust our approach, based on what they said.
12 That might mean that we fund a lot more studies if
13 they recommended that, or it might mean that we go
14 the other way, and then -- you know.

15 So once we had their report, then,
16 you know, we know what their recommendations are.

17 And as I said before, we were very
18 much concerned about funding studies that could be
19 to the detriment of our personnel. And the NRC
20 raised that issue, and that was a serious concern
21 for us.

22 I'll also point out that, you know,
23 Mary Ann Simmons was, you know, a public health
24 center person, and, you know, she's not part of
25 the budgeting decision. That was made by NAVFAC.

1 Q. Okay. And is it your testimony,
2 before you saw the prepublication copy, you did
3 not know that the findings by the NRC were going
4 to be critical and against the findings of ATSDR?
5 Is that what you're telling me?

6 A. No, that's not what I'm telling you.
7 But what I will tell you is that I
8 did not have any idea of what the NRC was going to
9 say until I saw their prepublication copy, and
10 then I knew what they said.

11 Q. How did you -- when was it you first
12 learned they were going to be critical? Was it
13 before they started doing their work, or was it
14 during the process of them doing the work? Who
15 told you they were going to be critical?

16 MS. SILVERSTEIN: Objection.

17 THE DEPONENT: As I've said, nobody
18 told me they were going to be critical. I had no
19 idea what they were going to say until I read
20 their report.

21
22 BY MR. DEAN:

23 Q. Okay. I misunderstood. I'm sorry.
24 I thought you just told me you were
25 aware before you got the prepublication copy that

1 they were going to be critical.

2 Did I misunderstand you?

3 A. You did. Perhaps it broke up a
4 little bit.

5 I would have said I was unaware. I
6 did not know what they were going to say until I
7 read their report, which would have been the
8 prepublication copy.

9 MR. DEAN: Okay. Let's go to the
10 last exhibit and see if we can do this in
11 6 minutes, which Haroon knows I take a little bit
12 longer than what I say, but I'll try.

13 MS. SILVERSTEIN: Is this Exhibit 11?

14 MR. DEAN: Tell me when you've got
15 Exhibit 11 up.

16 Yes, ma'am.

17 (Whereupon, Waddill Deposition
18 Exhibit 11, Various documents with cover sheet
19 being Action Items: Dan & Morris meet, Notes,
20 Contains Information Subject to Protective Order:
21 Do Not Disclose to Unauthorized Persons,
22 CLJA_NAVY_WADDILL_HC_0000000153-220, was marked
23 for identification.)

24 THE DEPONENT: Okay.

25

1 BY MR. DEAN:

2 Q. Now, Exhibit 11 to your deposition is
3 Bates-stamped 823, Waddill_HC_823 through --

4 A. Where are you?

5 I'm on some notes pages.

6 Q. Just a couple of pages I want to talk
7 to you about in here.

8 A. I'm not with you yet.

9 Q. If you turn to page 840.

10 Okay.

11 MS. SILVERSTEIN: Kevin, what's the
12 Bates stamp of the first page?

13 MR. DEAN: Of Exhibit 11?

14 MS. SILVERSTEIN: Yes.

15 MR. DEAN: 823.

16 MS. SILVERSTEIN: Okay. Our
17 Exhibit 11 is --

18 MR. DEAN: Did I introduce it in the
19 folder?

20 MS. SILVERSTEIN: There's an
21 Exhibit 11, but it is 153.

22 MR. DEAN: Is what?

23 Let me go into the Marked Exhibits
24 folder.

25 Okay. So let me just -- I'll re- --

1 MS. SILVERSTEIN: Yeah. I don't
2 think we have the right exhibit.

3 MR. DEAN: Give me just a second.
4 I'll redo it.

5 MS. SILVERSTEIN: Okay. Great.

6 MR. DEAN: I will put it in there and
7 I'll call it 13.

8 MS. SILVERSTEIN: Thanks.

9 MR. DEAN: Okay. To be marked.

10 I'll rename that as Exhibit 13.

11 (Whereupon, Waddill Deposition
12 Exhibit 13, Analyses of Groundwater Flow,
13 Contaminant Fate and Transport, and Distribution
14 of Drinking Water at Tarawa Terrace and Vicinity,
15 U.S. Marine Corps Base Camp Lejeune, North
16 Carolina: Historical Reconstruction and
17 Present-Day Conditions; Chapter A: Summary of
18 Findings; ATSDR, Atlanta, Georgia; July 2007;
19 Contains Information Subject to Protective Order:
20 Do Not Disclose to Unauthorized Persons;
21 116 pages, was marked for identification.)
22

23 MR. DEAN: I'm sorry about that. It
24 should be showing up in the folder as 13.

25 Do you see 13?

1 MS. SILVERSTEIN: Yeah. Mine is
2 coming up as the ATSDR report.

3 MR. ANWAR: Did he say, "13"?

4 MS. SILVERSTEIN: Is this the
5 Chapter A?

6 MR. DEAN: Exhibit 13 -- I'm looking
7 in the Marked Exhibits folder.

8 MS. SILVERSTEIN: Yeah. Exhibit A --
9 or Exhibit 13 is Chapter A, Summary Findings.

10 I just want to make sure that we're
11 pulling up the same document.

12 MR. DEAN: Okay. That's what happens
13 when you mark exhibits on the fly.

14 THE COURT REPORTER: Kevin, does it
15 say "ENC Today" on the top of it?

16 MR. DEAN: Yes.

17 THE COURT REPORTER: Yes. So somehow
18 you're not getting the right exhibit.

19 (Whereupon, Waddill Deposition
20 Exhibit 14, ENCToday.com Article: ATSDR report
21 sheds light on extent of Lejeune water
22 contaminants; October 22, 2010; Contains
23 Information Subject to Protective Order: Do Not
24 Disclose to Unauthorized Persons;
25 CLJA_NAVY_WADDILL_HC_0000000823-908, was marked

1 for identification.)

2
3 MR. DEAN: Exhibit 14?

4 THE COURT REPORTER: I've got -- this
5 is the court reporter.

6 My Exhibit 11 and my Exhibit 13 say
7 "ENC Today" on it.

8 MS. SILVERSTEIN: I've got it as 14.

9 THE COURT REPORTER: Now the court
10 reporter is confused.

11 So I have Exhibit 11, Exhibit 13, and
12 Exhibit 14 are the same exhibit.

13 MS. SILVERSTEIN: I just pulled up
14 what you put in as Exhibit 14. It has the Bates
15 stamp ending in 823. Is that what --

16 MR. DEAN: Let me see.

17 MS. SILVERSTEIN: The "ENC Today.
18 The ATSDR Report sheds light on extent of Lejeune
19 water contaminants."

20 MR. DEAN: So I'm in the Marked
21 Exhibits folder. Exhibit 13 is Chapter A
22 document.

23 I don't know what you're looking at,
24 Madam Court Reporter, but in the Marked Exhibits
25 folder, Exhibit 13 is Chapter A. It's

1 Bates-stamped, for the record, in the Marked
2 Exhibits folder -- it's not Bates-stamped,
3 actually.

4 It's the -- a pretty long document.
5 (Audio was interrupted.)
6

7 MR. DEAN: And then the other one you
8 said was 11? Is that right, 11?

9 And then in the folder -- I mean, in
10 the Marked Exhibits folder for Exhibit 11, that
11 Bates stamp again is 153.

12 MS. SILVERSTEIN: Yeah. I've got
13 that one.

14 MR. DEAN: Okay. So the new exhibit
15 I entered now --

16 MS. SILVERSTEIN: I have --

17 MR. DEAN: -- is Exhibit 14.

18 THE COURT REPORTER: Okay. I have
19 Exhibit 9 is 153.

20 MR. ANWAR: That's Exhibit --

21 THE COURT REPORTER: Okay. He's
22 changed -- these numbers are wrong, then.

23 MR. ANWAR: It might be Exhibit 9,
24 too.

25 MR. DEAN: So, no. You're in the

1 wrong folder, Madam Court Reporter.

2 THE COURT REPORTER: Okay.

3 MR. DEAN: The folder you need to be
4 in is the Marked Exhibits.

5 THE COURT REPORTER: Okay.

6 MR. DEAN: It says, "Dan Waddill."

7 THE COURT REPORTER: Okay.

8 Exhibit 14?

9 MR. DEAN: Yes.

10 THE COURT REPORTER: Okay.

11 MR. DEAN: The other folder is sort
12 of a work -- the other folder is sort of a working
13 folder, and I put the final exhibits we marked in
14 the deposition in the Dan Waddill Marked Exhibits.

15 THE COURT REPORTER: That's fine. I
16 just need to make sure I've got the exhibits
17 correct. Sorry.

18 MR. DEAN: Yes. That's okay. No
19 problem.

20 I've only been doing this two days,
21 so it's all new to me.

22 So are you ready, Dr. Waddill, and
23 got Exhibit 14, beginning Bates stamp 823?

24 THE DEPONENT: I believe so.

25

1 BY MR. DEAN:

2 Q. I want you to turn in that document
3 to -- there's a PowerPoint in here that came from
4 your hard copy files and it begins on page 843.
5 Bates stamp 843.

6 A. Okay. Yes.

7 Q. Now, this is a PowerPoint prepared
8 September 2nd, or it's dated September 2, 2010.

9 A. Correct.

10 Q. Do you see that?

11 A. Yes.

12 Q. Did you prepare -- did you prepare
13 this PowerPoint?

14 A. Yes.

15 Q. Do you know what it was for, other
16 than what it says?

17 A. No.

18 I mean, it says it's for the APOW
19 meeting.

20 I don't remember what that is.

21 Q. What is the APOW meeting?

22 A. I don't remember what that is.

23 Q. Could it be the Annual Punt on the
24 Water modeling?

25 A. I have no idea.

1 Q. If you turn two pages over to page
2 845, there's some handwritten notes. I want to
3 make sure I understand what they say.

4 A. Sure.

5 Q. Are you on that page?

6 A. Yes.

7 Q. Okay. You've got an Objective slide,
8 and you've handwritten a note there. It says,
9 Follow the NRC recommendation because it's there
10 mentioned, they are qualified, or something to
11 that effect.

12 Do you see that?

13 A. Yes.

14 Q. And then there's a typed note that --

15 Do you see those two typed notes
16 below this slide?

17 A. Yes.

18 Q. Did you type those notes?

19 A. I guess so. I don't remember.

20 Q. But the notes found in your hard copy
21 file with that typed slide under it says, "NRC
22 report is mentioned because they are a neutral
23 party and it fits their mission to make
24 recommendations in these situations."

25 Do you see that?

1 A. I do.

2 Q. So throughout the deposition you and
3 I have talked a lot about ATSDR and a lot about
4 the NRC. And I give you credit, your belief,
5 right or wrong, is the NRC was completely
6 impartial, the NRC is a neutral body. They are
7 created by Congress, and they are a mission to
8 provide sound policy recommendations to the
9 federal government. Right?

10 MS. SILVERSTEIN: Object to form.

11 THE DEPONENT: Yes.

12 Some of that is -- represents what I
13 said, but certainly not all of it.

14

15 BY MR. DEAN:

16 Q. Understood.

17 But, I mean, have you ever met any of
18 the people that were on the committee?

19 A. The NRC committee?

20 Q. Yes.

21 A. No. I did not meet any of them.

22 Q. Did you talk to any of them on the
23 telephone?

24 A. Not that I recall, no.

25 Q. Did you have any e-mail

1 communications with any of them during their
2 deliberation?

3 A. Certainly not that I recall. I can't
4 imagine that occurring.

5 Q. Were you privy to any agreements or
6 disagreements that were expressed during their
7 deliberations? Did anybody provide you with
8 information about how they did their work?

9 MS. SILVERSTEIN: Objection.

10 THE DEPONENT: Yeah. I certainly
11 don't recall anything like that. I can't imagine
12 it would have occurred.

13
14 BY MR. DEAN:

15 Q. So how is it -- so -- so your belief
16 that they are neutral and impartial is based on
17 your historic understanding of what that group's
18 mission is, because you, as a matter of fact,
19 quote some from their mission.

20 Is that fair?

21 A. My understanding is based on the NRC
22 mission, which you're right, I've quoted, and they
23 are tasked with providing independent analysis for
24 this kind of purpose.

25 Also, based on their credentials,

1 they are the top scientists in their fields, and
2 then also based -- and most significantly based on
3 what they wrote, which was soundly scientific and
4 impartial, and so all of those things give me
5 confidence in the NRC.

6 Q. And you're not -- you're not aware,
7 as you sit there today, of any inherent bias, any
8 secret meetings, any conflicts of interest that
9 were not made -- you were not made aware of?
10 You're not aware of any of that, if it exists?

11 MS. SILVERSTEIN: Objection.

12 THE DEPONENT: No. I'm certainly not
13 aware of that, and I can't imagine that would
14 occur. And, you know, the --

15
16 BY MR. DEAN:

17 Q. If there was some inherent conflicts
18 of interest not considered or ignored, if there
19 were secret meetings between the Navy and NRC, and
20 if there were some inherent biases of certain
21 committee members that were pre- -- pre-expressed
22 opinions against the ATSDR report before serving
23 on that committee, would you then have reason to
24 pause at the credibility of the NRC report?

25 MS. SILVERSTEIN: Objection.

1 THE DEPONENT: I'm just saying that
2 none of those things occurred, to my knowledge.
3

4 BY MR. DEAN:

5 Q. What if they did, and I can prove it
6 to you?

7 A. I'm just not aware that they did.

8 Q. Okay. When this information comes to
9 light, I'll make sure you get a copy of that
10 deposition transcript and you can be enlightened.
11 Okay, sir?

12 A. Sounds good.

13 (Whereupon, Waddill Deposition
14 Exhibit 15, Flights of Imagination; Intelligent
15 Design; An essay on Intelligent Design from Salvo
16 #65 in Headquarters; An Engineer Examines
17 Darwinian Explanations; by Dan Waddill; Salvo
18 Magazine; 6 pages, was marked for identification.)
19

20 BY MR. DEAN:

21 Q. All right. Last thing. I always
22 like to end on a good happy note, and out of
23 curiosity, take a look at Exhibit 15.

24 Let me know when you --

25 A. Got it.

1 Q. So how is it we can apply Darwinian
2 explanations to civil engineering science?

3 Let me ask first of all, did you
4 author this paper that was published in Volume 65
5 of something called Salvo?

6 A. I did.

7 Q. And is Salvo, A Magazine of Society,
8 Sex, & Science?

9 A. I don't know that. I mean, I don't
10 -- no, I don't see it that way.

11 I mean, if you found it, that's what
12 they say of themselves, I don't dispute it. I
13 just don't know.

14 Q. Well, if you go to Salvo magazine dot
15 com, Salvomag.com, under the "About" page, I was
16 trying --

17 Actually, you know what? I can share
18 that.

19 (Whereupon, a document was displayed
20 via screen share.)

21
22 BY MR. DEAN:

23 Q. Can you see my page?

24 A. Yes.

25 Q. Did I read it correctly? It says

1 it's a magazine about society, sex, and science.

2 A. Oh, yeah. Yeah. At the top, yeah.

3 Q. So did you publish Exhibit 15?

4 And it looks like it was published
5 the summer of '23, that article.

6 A. Yes.

7 And that falls under the science
8 section of their -- of their magazine.

9 Q. And you stand by everything you said
10 in this article?

11 A. Yeah. I believe I do.

12 (Whereupon, the document was removed
13 from screen share.)

14
15 MR. DEAN: All right. I do
16 appreciate your time today.

17 I'll pass the witness.

18 I do want to put on the record that
19 the witness has identified certain specific
20 documents and attachments to documents that were
21 produced in the Waddill hard copy production that
22 have not been produced, and he also made reference
23 to the files on his computer hard drive, his
24 laptop, that are subject to Request for Production
25 No. 7, and appended to the filed motion to compel.

1 To the extent those documents are ever made
2 available, I would reserve the right to come back
3 to this witness.

4 But with that said, I pass the
5 witness.

6 MS. SILVERSTEIN: Let's take a short
7 break before we ask any questions. It's been a
8 while.

9 MR. DEAN: That would be fine.

10 THE VIDEOGRAPHER: We're going off
11 the record at 4:15 p.m.

12 (Whereupon, a recess was taken from
13 4:15 p.m. to 4:27 p.m. EST.)

14
15 THE VIDEOGRAPHER: Back on the record
16 at 4:27 p.m.

17
18 MS. SILVERSTEIN: Great. Just for
19 the record, we are aware there are ongoing
20 conversations regarding discovery.

21 And, Kevin, we're happy to meet and
22 confer on any discovery concerns that you raised
23 earlier and look forward to written correspondence
24 on the issue to discuss that.

25

CROSS-EXAMINATION

BY MS. SILVERSTEIN:

Q. Dr. Waddill, do you remember receiving a litigation hold related to Camp Lejeune at some point?

A. Yes.

It would have been many years ago.

Q. And did you save or preserve your documents related to Camp Lejeune after receiving that hold?

A. Yes.

I saved everything, and I -- I saved everything related to Camp Lejeune regardless of when the lit hold came. It might have been before I started, but if it came -- I never threw anything away associated with Camp Lejeune.

Q. Is that true for your electronic documents also?

A. Yes.

(Whereupon, Waddill Deposition Exhibit 16, Dan W. Waddill, P.E., Ph.D., Curriculum Vitae, 4 pages, was marked for identification.)

MS. SILVERSTEIN: Okay. I am adding

1 to the folder Exhibit 16.

2 Oh. Actually, I am not adding to the
3 folder Exhibit 16. No. I don't have permission
4 to upload files.

5 THE COURT REPORTER: You can upload
6 them to Zoom.

7 MS. SILVERSTEIN: Yeah. I don't have
8 the Zoom up.

9 All right. Kevin, what do you want
10 me to do for exhibits? I can't upload exhibits to
11 the shared folder.

12 MR. DEAN: You cannot upload.

13 MS. SILVERSTEIN: I don't have
14 permission.

15 MR. DEAN: Well, imagine that.

16 Do you want to screen -- do you have
17 a hard copy or have you got them on a computer?

18 MR. ANWAR: Go off the record?

19 MS. SILVERSTEIN: Yeah. Can we go
20 off the record?

21 THE VIDEOGRAPHER: Going off the
22 record at 4:30 p.m.

23 (Whereupon, a recess was taken from
24 4:30 p.m. to 4:33 p.m. EST.)
25

1 THE VIDEOGRAPHER: We are back on the
2 record at 4:33 p.m.

3
4 BY MS. SILVERSTEIN:

5 Q. Okay. Dr. Waddill, I just handed you
6 Exhibit 16.

7 Is this your C.V.?

8 A. Yes.

9 Q. Did you draft this C.V.?

10 A. Yes.

11 Q. Does this C.V. accurately reflect
12 your education, background, and work experience?

13 A. Yes, through about 2014, which is
14 when I drafted this C.V.

15 I haven't been looking for a job, so
16 I haven't updated it since then.

17 Q. Okay.

18 A. But it's accurate through,
19 approximately, 2014.

20 Q. Okay. I'll ask you some questions
21 post-2014 --

22 A. Okay.

23 Q. -- so we can get an accurate picture
24 of that --

25 A. Okay.

1 Q. -- but I want to start with your
2 education background, which is on the last page.

3 Where did you get your bachelor's
4 degree from?

5 A. Davidson College near Charlotte,
6 North Carolina. I majored in mathematics.

7 Q. When did you graduate with that
8 degree?

9 A. 1983.

10 Q. And it says here you had a 3.75?

11 A. Correct.

12 Q. And then did you earn a master's
13 degree after that?

14 A. Yes.

15 A master's degree at Virginia Tech.

16 Q. What did you study?

17 A. Crop and soil environmental sciences.

18 Part of that degree, I was working on
19 groundwater contaminant modeling.

20 It was -- the environmental subjects
21 cross over between departments, and so I completed
22 my master's in 1994.

23 Q. What is crop and soil environmental
24 sciences?

25 A. Well, it -- historically, it was

1 called the agronomy department. So it was, you
2 know, related to growing crops for agriculture.
3 But as I said, they moved into the environmental
4 arena, and so it included that, and they changed
5 the name to make it more comprehensive.

6 Q. And you said you did some groundwater
7 modeling.

8 Could you explain a little bit what
9 you did in your master's program?

10 A. I took courses, a couple of courses
11 in groundwater modeling and contaminant transport.

12 One of the professors in that
13 department was, you know, a researcher in that
14 area.

15 Q. And when did you graduate with your
16 master's degree?

17 A. 1994.

18 Q. And that was with a 3.97?

19 A. Yes.

20 Q. And after your master's, you earned a
21 Ph.D.?

22 A. Yes.

23 Q. Where was that from?

24 A. That was Virginia Tech, again.

25 I switched into the civil engineering

1 department, and my emphasis was environmental. My
2 dissertation focused on groundwater contaminant
3 transport modeling.

4 Q. When you say groundwater contaminant
5 transport modeling was your focus for your
6 dissertation, can you explain what you mean?

7 A. Well, my dissertation was essentially
8 developing a model to do that on the computer. It
9 was called Scene 3-D.

10 My advisor, you know, was working in
11 that area, and so it -- it looked at modeling
12 contaminants and how they move in the subsurface
13 and also how they biodegrade as they're moving.
14 And so it was a computer model that captured those
15 processes.

16 Q. What kind of contaminants did you
17 focus on?

18 A. That one could do a range from the
19 chlorinated solvents, which would include PCE and
20 TCE, like at Camp Lejeune, and their breakdown
21 products, but also the petroleum products like
22 benzene, toluene, ethylbenzene, and xylene.

23 Q. You said you developed a model. Has
24 anyone else used that model?

25 A. Some.

1 My professor through Virginia Tech
2 set up a little, you know, corporation and sold
3 some copies of the model, and the proceeds were
4 split among the university and he and I. So it
5 was not a big moneymaker, but some people did buy
6 it, and I assume they used it.

7 Q. And when did you graduate with that
8 degree?

9 A. When?

10 Q. Yes.

11 A. 1998.

12 Q. And that was, again, with a 3.97?

13 A. Yes.

14 Q. When you were studying for your
15 master's and Ph.D., was following the science of
16 the utmost importance?

17 A. Yes.

18 And, you know, I think that, you
19 know, scientists have a position of privilege and
20 responsibility within society. I mean, we get to
21 work on interesting problems to the benefit of the
22 community, and it's our responsibility to do that
23 truthfully, you know, and diligently and tell
24 people truthfully what we know, but also be honest
25 about what we don't know.

1 Q. Do you have any professional licenses
2 or certifications?

3 A. I'm a professional engineer. So
4 that's the significant license for engineers.

5 Q. What does it mean to be a
6 professional engineer?

7 A. Well, you pass a couple of exams.
8 You have to have a certain amount of work
9 experience, and then, you know, you get
10 recommended from other people that you've worked
11 with who are professional engineers.

12 And at that point, you know, I'm
13 registered with the State of Virginia, and you
14 have the ability then to work independently as an
15 engineer to review documents, stamp documents, and
16 you're then responsible for those documents and
17 information.

18 Q. I want to talk about some of the
19 roles that you've had since finishing your Ph.D.

20 What was the first job that you had
21 after earning your Ph.D.?

22 A. I worked for a local consulting
23 company, Anderson & Associates. I was a manager
24 of environmental projects.

25 Q. What did you do -- what kind of work

1 did you do at Anderson & Associates?

2 A. Well, it was, you know, just a
3 variety of environmental projects.

4 One was, there was a jet crash in the
5 mountains nearby, and we were involved in
6 designing the cleanup of the fuel that spilled
7 that was a result of that crash.

8 Q. Did you provide the technical support
9 in that role?

10 A. Well, yes. I mean, yeah.

11 Q. How long were you at Anderson &
12 Associates?

13 A. Two or three years.

14 Q. After leaving Anderson & Associates,
15 where did you work?

16 A. I worked out west for a while -- that
17 was not in an environmental field -- for about a
18 year and then got the job with the Navy in 2000.

19 Q. Was that with NAVFAC?

20 A. Yes.

21 NAVFAC Southern Division in
22 Charleston.

23 Q. And what was your position with
24 NAVFAC Southern Division?

25 A. I was in the technical support branch

1 for the Environmental Restoration Program, and so
2 that's where we clean up contaminated sites. And
3 so I worked with many project managers at their
4 site, and designing and negotiating with
5 regulators over how those sites would be
6 investigated and cleaned up.

7 Q. Did -- while you were at NAVFAC
8 Southern Division, did you provide technical
9 support for cleanup projects?

10 A. Yes. That was my -- that was my
11 role.

12 Q. As part of that role, did you do any
13 water modeling?

14 A. Not directly, but I worked with the
15 model at Jacksonville.

16 That was a USGS model, I believe.
17 But, you know, that was -- that was -- part of the
18 work was working with that model.

19 Q. What was your involvement with the
20 Jacksonville model?

21 A. Well, just, you know, the looking at
22 the results and planning follow-on work and, you
23 know, just basically -- the model was just one
24 piece of the overall information that we used.

25 There were a lot of -- we'd take

1 samples, do investigation, and then, you know, put
2 it all together to design a cleanup.

3 And then, of course, this is done in
4 collaboration with the state and federal
5 regulatory agencies.

6 Q. How was the water model for
7 Jacksonville used?

8 A. It was a predictive model, predicting
9 flow of contaminants into the future and when they
10 might reach receptor. And so it helped us with
11 planning, just to have a preliminary idea of, you
12 know, when that might occur.

13 But, of course, we did not use that
14 as a sole basis for decisions. We took samples
15 and, you know, made sure that, you know, that --
16 that we were making the right decisions for what
17 was going on in the real world in the field.

18 Q. You mentioned that you also took
19 samples. How -- how did that affect the use of
20 the model?

21 A. Well, you know, depending on what the
22 contamination is and where it is, we sample soil
23 sediment. We do groundwater samples a lot with
24 monitoring wells.

25 And, you know, any of that

1 information that's relevant to the model would be
2 incorporated into it to -- to make it more
3 accurate.

4 And, again, it was really USGS that
5 was -- that was doing all of that. So I'm a
6 little fuzzy on exactly how -- how we used it. It
7 was a long time ago.

8 But, you know, basically it helped us
9 with the planning, but everything was always
10 verified with sampling in the field.

11 Q. Was the verification with sampling in
12 the field an important part of the process?

13 A. Yes.

14 I mean, that's certainly the most
15 important part of the process. And, you know, to
16 be able to communicate what we want to do to the
17 regulators, they -- you know, they always want to
18 see samples, in my experience.

19 Q. How long were you at NAVFAC Southern
20 Division?

21 A. Roughly, six years.

22 Left in 2006.

23 Q. And where did you go after 2006?

24 A. I came here to NAVFAC Atlantic in
25 Norfolk.

1 Q. Okay. It looks like here you were in
2 environmental engineering technical support?

3 A. Yes.

4 So I was basically doing the exact
5 same thing I did at Southern Division, it was just
6 I was working out of this office. Had a different
7 area of responsibility.

8 So I started working bases in
9 Virginia and the Northeast as opposed to the
10 Southeast.

11 But it was basically just the same
12 kind of work, working with project managers,
13 providing technical support for cleanup
14 investigations, and remediation.

15 Q. Did you work on any water modeling
16 projects?

17 A. Yes.

18 Bethpage was a significant project
19 that had water modeling associated with it.

20 Q. What was your role or your
21 involvement with the Bethpage water modeling?

22 A. What happened was the model had been
23 put together by Geraghty & Miller, a very
24 reputable outfit, and it was predicting when
25 contamination would reach water distribution wells

1 on Long Island. And so, you know, that was very
2 important, because, you know, if contamination
3 gets in the drinking water, there's, you know,
4 potential exposure.

5 And so, you know, the model made its
6 predictions, and then just wisps of contamination
7 started showing up earlier than expected. So I
8 was asked, you know, as the Navy subject matter
9 expert, to look at the model and see if there were
10 any problems.

11 And, you know, there were no problems
12 with the model. And it just -- it's just that
13 models are -- you know, there's only a degree of
14 accuracy that you can achieve with such a model,
15 and that's why, you know, we were also sampling,
16 to ensure that what we knew -- that we knew what
17 was going on in the field and that we could
18 protect the water supply.

19 But, you know, for preliminary
20 planning, the model is a very useful tool.

21 Q. If there was nothing wrong with the
22 model, why did the sampling data not match the
23 model?

24 A. Well, it's just -- it's basically --
25 there's an element of just unpredictability

1 associated with the movement of groundwater and
2 with the movement of contaminants in groundwater.

3 And, you know, you can do your best,
4 but you just -- it's just they're -- the model
5 predictions are only -- have limited accuracy.

6 Q. It looks like from your C.V., in May
7 2007 you changed roles to engineering support
8 section head, supervisory.

9 A. Yes.

10 Q. What was that role?

11 A. You know, basically, I was doing the
12 same kinds of things. I was just a supervisor of
13 a group. So I was promoted to supervisor.

14 I continued in my technical support
15 role, you know, the same as before.

16 I would say my supervisor duties
17 were, maybe, 10 percent of the work and the
18 technical support would be the other 90.

19 Q. While you were in this engineering
20 support supervisory role, did you work on any
21 water modeling?

22 A. That's probably when the Bethpage
23 work occurred. I had been promoted to supervisor
24 when that was going on.

25 I'm fuzzy on the dates. But, yeah.

1 Q. Okay. And it lists here May 2007 to
2 January 2010.

3 Would that have been when the Camp
4 Lejeune project was ongoing as well?

5 A. Yes.

6 I was pulled into Camp Lejeune, you
7 know, early 2008, as best I recall. And, you
8 know, I was, you know, regularly involved through
9 2009, probably 2010, and then it started to slow
10 down.

11 But I did continue to be involved as
12 needed, just once in a while, probably through
13 2013, maybe a little later.

14 But, yeah. 2008 is when the Camp
15 Lejeune work started for me.

16 Q. The next position that you list here
17 is from January 2010 to February 2011, RCRA and
18 hazardous waste branch head, supervisory.

19 What is that role?

20 A. I moved out of environmental cleanup
21 and into the environmental compliance area.

22 So what that involves is doing the
23 planning and the execution needed to keep our Navy
24 and Marine Corps bases in compliance with the
25 various environmental laws.

1 And so it's just -- it's a different
2 aspect of the environmental work. And I did that
3 for a year, a year and a half maybe, and then came
4 back to restoration.

5 Q. When you came back to restoration,
6 was that for the Vieques restoration branch
7 position?

8 A. Yes.

9 Q. Could you describe what you do in
10 your current position?

11 A. Sure.

12 It's -- my group does technical
13 support for the Navy and Marine Corps Munitions
14 Response Program across the country.

15 So it's the same kind of thing that I
16 was doing for the chemical contaminants, it's just
17 the explosive hazard is the focus.

18 And so there's unexploded ordnance
19 associated with ranges that have been used and
20 closed, and that unexploded ordnance needs to be
21 cleaned up. And so we provided technical support
22 -- we do provide technical support for project
23 managers across the country.

24 And then we also manage directly here
25 the cleanup of the Vieques bombing range, which is

1 the biggest project in the Navy Munitions Response
2 Program. That's an island off the coast of
3 mainland Puerto Rico.

4 Q. In your current role with the Vieques
5 Restoration Program, do you spend any time working
6 with chemical component cleanup?

7 A. Some.

8 There's an element associated with
9 munitions, you know. Chemical contaminants are --
10 we still investigate and clean up as necessary,
11 but the vast majority of that work is addressing
12 the explosive hazard.

13 Q. And is this the -- have you had --
14 been in this position, the Vieques position,
15 continuously since 2011?

16 A. Yes.

17 Q. Have you held any other positions
18 during that time?

19 A. Not officially.

20 I was detailed for a couple of years
21 unofficially to the Deputy Assistant Secretary of
22 the Navy's Office for Environment and Mission
23 Readiness. And I started out filling in for one
24 of the deputy's people who had become seriously
25 ill, and he asked me to fill in.

1 And then, ultimately, I started
2 working out at Red Hill for the closure plan that
3 was -- that the Navy developed for closing the Red
4 Hill fuel storage tanks.

5 Q. What did that -- that position --
6 what did that role include?

7 A. Basically, you know, I put together a
8 team to write the closure plan, negotiate with the
9 regulators.

10 We -- all of our products were
11 reviewed, you know, by a lot of people, right up
12 through the Secretary of Defense at first, and
13 then, you know, subsequent documents, to kind of
14 refine the process and work with other pieces.

15 And so that -- that planning -- it's
16 about a year and a half of that -- lays the
17 foundation for how the Navy will close the tanks.

18 And while we were doing our planning,
19 the defueling team was getting the fuel -- well,
20 planning and then removing the fuel from the
21 tanks.

22 Q. As part of the planning for the
23 closure at Red Hill, did you do any kind of
24 assessment for chemical components or other
25 contaminants?

1 A. A site assessment is part of tank
2 closure, so we did write a plan for that, but we
3 did not do any fieldwork.

4 There's a lot of fieldwork ongoing
5 associated with that, but that was not part of
6 what my group was doing. And there is some
7 modeling associated with that work. But, again, I
8 was not involved with that.

9 Q. Okay. It also looks like you've
10 received some awards and recognitions. There's a
11 couple that I have a few questions about.

12 A. Sure.

13 Q. One of them is NAVFAC Leadership
14 Development Program candidate.

15 What is the leadership development
16 program?

17 A. It's a program that you apply for.

18 You have to be recommended by your
19 supervisor and a higher-level manager, and there's
20 an interview process, and if you're accepted --
21 the idea is to train people to be better leaders
22 for NAVFAC. And so there's various things that
23 you do over a couple of years, including
24 interviewing senior leaders, projects. There's
25 training classes that you take, rotations. Like

1 one rotation I had was with the NAVFAC business
2 manager in D.C.

3 So you just get to see different
4 aspects of how NAVFAC works with the idea of
5 training future leaders.

6 Q. Is it a competitive program?

7 A. It's competitive.

8 You fill out a recommendation and you
9 get recommended, and they -- out of that pool,
10 they select a certain number to interview and you
11 go through the interview process to be selected.

12 Q. And it says here -- and I know you
13 said you haven't updated this in a while. It
14 says, "Expected graduation 2014."

15 A. Yes.

16 Q. Did you graduate from that program?

17 A. I did, yes.

18 Q. Was that around 2014?

19 A. Yes.

20 Q. Okay. And then the other one I
21 wanted to ask about is top 10 finalist for
22 National Society of Professional Engineers,
23 Federal Engineer of the Year.

24 What is that?

25 A. Well, that's a national program that

1 the society runs.

2 And when I was at the Southern
3 Division, my supervisor nominated me for that
4 award at the local Southern Division level.

5 And so I was selected there, and then
6 went up -- you enter the pool for, I guess, for
7 NAVFAC-wide. It may be Navy-wide. And so I was
8 selected at that level, too, and became one of the
9 10 finalists.

10 And, you know, we went up to D.C. and
11 there was, you know, a ceremony.

12 Ultimately, I was not selected as the
13 winner, but it was just a big deal to just be in
14 the top 10.

15 Q. Have you ever published any papers?

16 A. I published several associated with
17 my Ph.D. research, and I have been a coauthor on
18 at least one, maybe a few other papers since I've
19 worked for the Navy. But my role with the Navy is
20 not to do research.

21 I do work with researchers. I help
22 identify what the research needs are for the
23 program, and, you know, review reports, that kind
24 of thing, but I've not done research, really,
25 since I graduated.

1 Q. Okay. For the papers that you
2 published, as I understand before you were a part
3 of the Navy or part of NAVFAC --

4 A. Yes.

5 Q. -- do you remember what those papers
6 were about?

7 A. Well, one was about my dissertation,
8 describing the development and application of that
9 groundwater transport model.

10 I also did, associated with my Ph.D.,
11 laboratory work associated with how nonaqueous
12 phase liquids move through the subsurface.

13 So a nonaqueous phase liquid is
14 something like dry cleaning fluid, PCE, which, you
15 know, it's a -- it's a fluid that doesn't mix with
16 water. It's nonaqueous.

17 And so gasoline is another, you know.
18 When it spills, it doesn't mix with water, but it
19 dissolves a little bit into water. So lab work
20 associated with that. There was a paper or two
21 coming out of that work.

22 But it was all related to, you know,
23 applications of modeling related to environmental
24 spills and cleanup.

25 Q. Okay. I know I'm asking you to

1 remember a long time ago, but do you remember any
2 of the journals those were published in?

3 A. Journal of Contaminant Hydrology was
4 one. Groundwater was one. Journal of
5 Environmental Engineering, I believe, was one.

6 Those are the ones I remember.

7 Q. Were those peer-reviewed papers?

8 A. Yes.

9 Q. In addition to those papers, have you
10 published any -- anything else?

11 A. No.

12 Just the one publication that Kevin
13 brought up.

14 Q. Okay. And so you've spent, roughly,
15 24 years with NAVFAC?

16 A. Yes. Yes.

17 Q. And is it accurate to characterize
18 your work as working on environmental cleanup
19 efforts at Navy or military installations around
20 the country?

21 A. Yes.

22 Q. And have the environmental cleanup
23 efforts you've worked on helped ensure that Navy
24 and military installations are clean and safe for
25 service members and their families?

1 A. Yes.

2 MR. DEAN: Object to the form of the
3 question.

4 THE DEPONENT: Yes.

5 I mean, that's the primary focus, is
6 to clean up sites and in the process be sure that,
7 you know, everybody is safe and unaffected.

8 And it also -- you know, also, it's
9 not just Navy and Marine Corps installations.
10 It's also closed installations, like Vieques, you
11 know.

12 Our work there is to keep the public
13 safe while we're cleaning up the old bombing
14 range, and we put a tremendous amount of effort
15 into educating people into doing things in a way
16 that the public is not exposed and not at risk.

17

18 BY MS. SILVERSTEIN:

19 Q. During, you know, the past 24 years
20 when you've been working on these cleanup efforts,
21 is it important to you and your work that you
22 follow scientific approaches in the cleanup
23 efforts?

24 A. Yes.

25 I mean, that's -- that is something

1 that we all value highly and, you know, that we
2 use data and scientific methods to design our
3 approaches.

4 And one aspect of being a
5 professional engineer that they really, really
6 emphasize is, -- you know, the engineering ethic
7 of doing things the right way and not putting
8 people in danger.

9 Like, we have potential dangers from
10 environmental hazards, but engineers that build
11 bridges, say, you know, they have to do things the
12 right way or, you know, a bridge can collapse --
13 or a building.

14 So that is a really, really big part
15 of the engineering profession, and it starts in
16 school and it just continues. So that's something
17 that I value, and everybody that I work with, I've
18 seen that they value it as well.

19 Q. I want to shift gears from talking
20 about your background to talking about water
21 modeling more specifically.

22 Just to make sure we're kind of all
23 on the same page, when we're talking about water
24 modeling, what is water modeling?

25 A. It's -- it's a term that ATSDR used

1 to describe their work, and it's a good one, and
2 their work had two aspects to it.

3 One was the groundwater contaminant
4 transport modeling. And, you know, that's what I
5 did in graduate school and that's what I was
6 focused on. It's how the contaminants, you know,
7 get into the groundwater and how they move through
8 it.

9 But a big piece of ATSDR's work was
10 when those contaminants reach a water supply
11 well -- you know, it's pumped out of the ground,
12 it's put into pipes, it goes through water
13 treatment, it gets into more pipes, and it reaches
14 people's homes and it comes out the tap. And what
15 they want to know is -- at Camp Lejeune -- you
16 know, they want to know what concentrations came
17 out of the tap. So that second piece is very
18 important. You might call it water distribution
19 modeling.

20 And so ATSDR appropriately used the
21 term "water modeling" to encompass both of those
22 pieces.

23 Q. Okay. So if I say, like, groundwater
24 modeling, that would apply to the transfer of
25 contaminants in the groundwater?

1 A. Not necessarily.

2 There's also a water supply question
3 that groundwater modelers address, like the City
4 of Savannah and Hilton Head, cities that use
5 groundwater near the coast, they might use models
6 to determine how much water can I pump out of the
7 ground and still not have any saltwater intrusion.
8 And so there's no contaminants involved. It's
9 just water supply.

10 So that is one aspect of groundwater
11 modeling.

12 And if you throw in the contaminant
13 transport, it's how the contaminants move through
14 the groundwater.

15 Q. Okay. What was your involvement with
16 the ATSDR Camp Lejeune water modeling work?

17 A. Basically, I was asked, you know, by
18 -- and I don't remember specifically, but I
19 believe it surely must have been NAVFAC
20 headquarters who asked me to review a draft report
21 by ATSDR on their water modeling effort at Tarawa
22 Terrace, and that report was not yet complete, and
23 I think they made a presentation associated with
24 it.

25 So, you know, I reviewed what ATSDR

1 had at the time and, you know, provided my
2 comments to the Navy people, and then from there,
3 you know, I ended up participating in meetings
4 regularly for, I think it was, at least a couple
5 of years, and, you know, providing that kind of
6 technical input into their groundwater contaminant
7 transport modeling. That was -- that was my role.

8 Q. Did you provide comments on both the
9 Tarawa Terrace modeling and the Hadnot Point
10 modeling?

11 A. Yes, but far more comments on Tarawa
12 Terrace.

13 You know, Hadnot Point was not -- I
14 don't think that modeling effort had even started
15 yet. And then my involvement was much, much less
16 by the time Hadnot Point came around.

17 Q. Did you -- when you say you provided
18 technical support, what exactly do you mean?

19 A. Well, I was -- you know, I was
20 looking at what Tarawa Terrace -- I mean, what
21 ATSDR reported, you know, they were doing with the
22 model.

23 And then, you know, the question is,
24 you know, as a technical expert, what do you think
25 of that? Is it a good approach? Do you have

1 concerns?

2 And so, you know, I did see concerns,
3 and I expressed those, and it became an ongoing
4 source of discussion for ATSDR for many meetings,
5 you know, over a year or two.

6 Q. Who did you work with on the water
7 modeling?

8 A. Mostly, you know, I worked with Kim
9 Parker Brown. She was at NAVFAC headquarters.
10 Scott Williams was the Marine Corps, you know. I
11 think those were the primary people that I worked
12 with.

13 But as far as doing the evaluations,
14 you know, there really -- I was the technical
15 expert for the Navy, and we didn't have anybody
16 else. So, you know, I was essentially doing that
17 by myself.

18 There were, you know, consultants who
19 were involved at times. But, you know, the real
20 -- most of the effort I was doing myself as far as
21 technical evaluation, but then meeting with people
22 regularly and talking about, you know, what it all
23 means and explaining to them what it means.

24 Q. Do you remember who at ATSDR you
25 worked for?

1 A. Morris Maslia was their head water
2 modeler. And I never worked with him, but he was
3 certainly at meetings and, you know, he -- he was
4 the point of contact on that side.

5 Frank Bove was a name I remember from
6 many meetings. He was an epidemiologist.

7 Q. When you say you didn't work with
8 them but they were at meetings, were those the
9 people at ATSDR that you communicated with?

10 A. Yes.

11 And, you know, ATSDR was doing their
12 water modeling -- you know, they were doing it
13 themselves, you know. I wasn't helping them at
14 all or even involved in their decisions. It was
15 just -- my role was, you know, evaluating what
16 they were doing and presenting that evaluation to
17 Navy folks and to ATSDR at meetings.

18 And, you know, so I -- you know, I
19 don't recall really communicating with anyone at
20 ATSDR directly. That may have occurred once in a
21 while, but, you know, by and large, it was just --
22 you know, I was working with the Navy personnel
23 and then participating in these larger meetings.

24 Q. Okay. What is your understanding of
25 how the ATSDR water modeling work was funded?

1 A. As far as I know, the Navy funded it.
2 It was -- you know, the Navy funded that work.

3 Q. Do you know if after 2009, the Navy
4 continued to fund ATSDR work related to Camp
5 Lejeune?

6 A. My understanding is yes, they
7 continued to fund that work for many years.

8 And, you know, I sort of lost
9 contact, but they may still be. I just -- I don't
10 know about that. It's possible.

11 But, yeah. That continued.

12 Q. Based on your experience with water
13 modeling, what is water modeling generally used
14 for?

15 A. Well, for -- you know, for
16 groundwater contaminant transport modeling, it's
17 generally used for planning purposes and the
18 predictions are run into the future.

19 And as I said, you -- you take
20 samples and you be sure that you have real-world
21 measurements to verify what the model has said.

22 But the model in that case can be
23 very useful just because you can plan. But you
24 would never let your plans depend on the model
25 alone. There would always be real-world samples

1 taken to verify and to be sure that you're doing
2 things right.

3 Q. Why -- why would you take real-world
4 samples along the way to verify the model?

5 A. Well, partly, you know, sampling and
6 analysis of the samples, that's just part of the
7 cleanup programs that we work under. And it's
8 those samples that drive decisions, that drives
9 how we do the cleanup.

10 You know, the samples are the
11 drivers, you know. A model can be useful as far
12 as planning, but the model would not be driving
13 decisions. Certainly, not alone. It might help
14 guide where you take samples.

15 But, you know, the sampling is just
16 an essential part of the cleanup program.

17 Q. How did ATSDR use water modeling?

18 A. Well, the -- what they described at
19 their -- in their draft report was that, for the
20 epidemiological studies that they wanted to do,
21 they needed monthly concentrations of contaminants
22 that people were exposed to, going back --
23 starting in the '80s and going back through the
24 '70s and the '60s and the '50s. So it's unusual.

25 You know, typically models are

1 predicting the future. This one is trying to
2 reconstruct the past. And it may have been done
3 at other places, but the only one I'm aware of is
4 the ATR's work at Camp Lejeune.

5 The difficulty, of course, if you're
6 trying to reconstruct the past with a model, is
7 that you cannot go back into the past to take
8 samples. You know, when you're predicting into
9 the future, you can always take samples and be
10 sure that the model is actually helping you rather
11 than giving some erroneous results.

12 But if you -- if you're hindcasting
13 or trying to recreate the past, you can't check
14 the model. There's no way to check it. If you
15 don't have data, you can't go back.

16 Q. Why would the ability --

17 MR. DEAN: I'm sorry.

18 Can you hear me?

19 MS. SILVERSTEIN: Yeah. We can hear
20 you.

21 MR. DEAN: Can you hear me?

22 I'm sorry. I made an objection to
23 the form of the question on that last question,
24 but my speaker wasn't working. So please make a
25 note, I object to the form of that last question.

1 You may continue.

2 Also, it was nonresponsive, by the
3 way.

4
5 BY MS. SILVERSTEIN:

6 Q. Why is the -- why does it matter
7 whether or not -- why does it matter that you
8 can't go back into the past and take historical
9 samples?

10 A. Well, you know, groundwater
11 contaminant transport modeling is not accurate
12 enough to produce results that can support health
13 studies if you can't check it.

14 You know, if -- like the situation at
15 Camp Lejeune was, they had real-world samples in
16 the 1980s. They used all of the sample data to
17 calibrate the model, and so they had no additional
18 data to compare to the '50s, '60s, and '70s, and
19 that's the same frame of interest.

20 And so the model is just sort of out
21 there on its own with no support. And, you know,
22 models are just not accurate enough to be used in
23 that way.

24 Q. Is it possible to validate the
25 results of a groundwater transport model without

1 historical data samples?

2 A. Well --

3 MR. DEAN: Objection to the form.

4 MS. SILVERSTEIN: Kevin, for -- for
5 what reason, so I can rephrase my question?

6 MR. DEAN: Object to the form.
7 That's all I have to provide as far as the nature
8 of my objection.

9 MS. SILVERSTEIN: Okay. I'm just
10 wondering --

11 MR. DEAN: The question --

12 MS. SILVERSTEIN: -- what the reason
13 is so I can rephrase my question to make sure the
14 form is proper.

15 MR. DEAN: He's your witness. You're
16 leading him and have been for an hour.

17 MS. SILVERSTEIN: Okay.

18
19 BY MS. SILVERSTEIN:

20 Q. Okay. Is it possible to validate the
21 results of a water model without historical data?

22 A. Well, you know, if -- the way
23 validation works is, you know, you use a certain
24 portion of the data to calibrate the model and
25 that involves adjusting the inputs, the model

1 inputs, such that your model output matches the
2 real-world data as best as you can do it. And
3 ATSDR did that at Camp Lejeune, but they only had
4 data in the '80s.

5 So validation involves, you take your
6 calibrated model and you don't change the inputs
7 anymore. That would be forbidden. That would be,
8 you know, biasing the results.

9 So you take your calibrated model,
10 you stick with the inputs that you have, and you
11 run -- in this case they're running the model into
12 the past.

13 Now, validation would be you have to
14 have another data set during a different
15 timeframe, and you compare the model output with
16 the different data set that you have. And so if
17 -- if you're running the model into the past and
18 the data aren't available, then they never will be
19 available. And so your model is, and the ATSDR
20 was, unvalidated. They were not able to validate
21 it.

22 Q. You've mentioned calibration a couple
23 of times. What does it mean to calibrate a model?

24 A. Well, when you -- when you apply a
25 model, you need various inputs.

1 There are things like -- you know,
2 how big is the site? Where did the -- where was
3 the source of contamination? Where are the
4 receptors? Like, the water supply wells.

5 What's the pumping rate for the water
6 supply wells? When did they come on and off?

7 And then you have to know soil
8 properties. Like the hydraulic conductivity of
9 the soil describes how fast water might be able to
10 move through the soil, and it varies a lot.

11 You have to describe the contaminant
12 properties.

13 So there are all these inputs that
14 you need to provide, and some of them are
15 difficult to measure or you can't measure them
16 directly, and so the calibration step is just --
17 in order to improve the model accuracy, you -- you
18 use measured values. You go to literature, you
19 look up values, and you take your best shot at the
20 input numbers. And then you run the model and you
21 compare the output -- in this case it would be the
22 concentrations, to the measured concentrations
23 that you have in the 1980s for Camp Lejeune.

24 And then you tweak the inputs and run
25 the model again, and you keep tweaking until you

1 get the best fit that you can get, you know,
2 between the model and the real world.

3 And so, you know, that's what helps
4 build confidence that the model -- that the model
5 inputs are what you want them to be.

6 But then, you know, as I've said, the
7 really important step is to validate that
8 calibrated model against another data set, to see,
9 you know, how do your model outputs match the real
10 world, because if the model doesn't match the real
11 world, then it's of no value. Because we don't --
12 you know, people are exposed to real-world
13 concentrations. It goes without saying, really,
14 but...

15 Q. Did you have concerns about the ATSDR
16 Tarawa Terrace water model?

17 A. Yes. Yes.

18 Q. What concerns did you have?

19 A. Well, starting with the calibration,
20 there was -- the difficulty with the calibration.

21 You know, they were adjusting the
22 parameters as best as they could. But at the
23 water supply wells, the majority of the wells,
24 they could not make the model predictions come
25 within the calibration range that they had chosen.

1 So they just couldn't get the model
2 to match up very well with the real world during
3 calibration, and that suggests that there's some
4 process that the model is just not capturing, and
5 you don't really know what it is. You just know
6 that it's not working out. It's not matching up,
7 despite your best efforts to adjust the input
8 parameters. So that's a concern.

9 The bigger concern is, though, that
10 there's no validation data. So when they run that
11 model into the past, the model is just
12 unvalidated. And there's no check between the
13 model output and the real world for over three
14 decades, and those are the decades of interest.

15 Q. Did you raise these concerns with
16 anybody?

17 A. Yes.

18 I certainly expressed them at first
19 to Navy and Marine Corps folks, and then, you
20 know, brought it to the attention of ATSDR in
21 numerous meetings.

22 Q. Within the relationship between the
23 Navy and ATSDR, was that the appropriate way to
24 raise the concerns?

25 A. I believe so, yes.

1 I mean, you know, these were
2 regularly scheduled, ongoing meetings to try to,
3 you know, work together as well as possible.

4 Q. Was ATSDR using a groundwater model
5 together with the water distribution model?

6 A. Yes.

7 They did do the modeling of the
8 distribution system. I didn't really evaluate
9 that. I'm not as familiar with that.

10 I am aware that they had issues with
11 just not knowing when the supply wells were coming
12 on and off and what the pumping rates were, you
13 know. That information, in many cases, is
14 unknown.

15 And sometimes, like the piping and
16 the valves, when valves were opened and closed,
17 that information was unknown. And, of course,
18 that affects how the water distribution goes.

19 But I -- you know, other than kind of
20 hearing about the issues that they were facing, I
21 did not evaluate that work.

22 Q. Okay. Based on your experience with
23 groundwater, with water modeling generally, do you
24 know whether it's common to do the two types of
25 water modeling together?

1 A. You know, I don't think it is.
2 There's certainly nothing wrong with
3 it.

4 Q. Okay.

5 A. And, you know, it's -- it would be
6 what you want.

7 You know, it depends on what the
8 receptor is. Like the receptor might be
9 discharged to a water body, and, you know, a
10 groundwater well there would be representative and
11 you wouldn't -- there would be no distribution to
12 model.

13 But in this case, I think, you know,
14 having that portion of it was appropriate.

15 Q. Okay. Does having the two types of
16 water models together affect the uncertainty
17 analysis at all?

18 A. Well, it -- there's uncertainty
19 associated with both pieces. And, you know, it's
20 certainly incumbent upon the modelers to express
21 that uncertainty clearly to the stakeholders.

22 Q. Okay. When you raised your concerns
23 about calibration and model validation to ATSDR,
24 what kind of response did you receive?

25 A. You know, it was negative and some

1 meetings were contentious. And, you know, they
2 didn't like to hear what I was saying. Because,
3 you know, basically, I was -- you know, I was
4 saying that the model results were not valid and
5 were not appropriate to use for the EPI studies,
6 that these monthly concentrations that they needed
7 were just more than the model could produce with
8 any kind of accuracy.

9 (Whereupon, Waddill Deposition
10 Exhibit 17, Letter from B.P. Harrison, MPA, P.E.,
11 to Thomas Sinks, Ph.D., National Center for
12 Environmental Health/Agency for Toxic Substances
13 and Disease Registry; June 19, 2008; with
14 attachment, Assessment of ATSDR Water Modeling for
15 Tarawa Terrace; CLJA_2019ATSDR04-0000002372-2379,
16 was marked for identification.)
17

18 BY MS. SILVERSTEIN:

19 Q. I'm handing you Exhibit 17.

20 Exhibit 17 ends in -- is
21 Bates-stamped 2019ATSDR042372.

22 If you look at the top, right-hand
23 corner, do you see that this is a letter dated
24 June 19, 2008?

25 A. Yes.

1 Q. And it's addressed to Thomas Sinks,
2 Ph.D.?

3 A. Right.

4 Q. Do you know who Dr. Sinks is?

5 A. Well, you know, he was leadership
6 with ATSDR.

7 Q. Okay. On the second page, the letter
8 is signed B.P. Harrison.

9 Who is B.P. Harrison?

10 A. Brian Harrison was the head of the
11 Environmental Restoration Program for NAVFAC in
12 Washington, D.C.

13 Q. And under "Copy to," it lists NAVFAC
14 Atlantic, D. Waddill.

15 Is that you?

16 A. That's me, yes.

17 Q. Are you familiar with this letter?

18 A. Yes.

19 Q. Did you contribute to writing the
20 body?

21 A. Not to writing the body of the
22 letter, but to writing the attached assessment. I
23 wrote that.

24 Q. By "the attached assessment," are you
25 referring to "Assessment of ATSDR Water Modeling

1 for Tarawa Terrace"?

2 A. Yes.

3 Q. And does this letter accurately
4 reflect the Navy's activities and views of working
5 with ATSDR on the Camp Lejeune water modeling?

6 A. The letter itself?

7 Q. The letter and attached assessment.

8 A. Yeah.

9 I think -- I think it does. In
10 particular, you know, the letter, he says -- he
11 reiterates continued support for working with
12 ATSDR. And I think that's always the way we
13 wanted it to be, to look for ways to cooperate
14 best.

15 The -- you know, there were some
16 concerns, but the idea at this point was, you
17 know, we're -- we just want to work with you to,
18 you know, make improvements, and with the goal of,
19 you know, supporting the health of our personnel.

20 You know, what -- what we want more
21 than anything is, you know, good science,
22 scientific information that's accurate, that helps
23 our people get the right -- be healthy.

24 And so, you know, that's -- that's
25 the goal expressed in the letter.

1 The document that I wrote expresses,
2 I think, accurately our concerns at that time.
3 And, you know, we were just getting started, so
4 there were questions that we didn't know the
5 answers to yet.

6 But this, you know, raises the basic
7 issues, and, you know, more information certainly
8 followed.

9 Q. On the page ending with Bates 2376,
10 you talk about ATSDR performing a sensitivity
11 analysis.

12 What is a sensitivity analysis?

13 A. It's where the -- you determine how
14 important certain of the input parameters are.

15 Like, some -- some of the input
16 parameters, if you change them a little bit, the
17 model output might change a lot, so you say the
18 model is very sensitive to that parameter.
19 Others, you can change them and the output doesn't
20 change very much, so it's not very sensitive.

21 So, you know, associated with that,
22 you know, they did a probabilistic analysis of,
23 you know, repeated runs of the model in which
24 input parameters were varied, and then they
25 compared how the various runs of the model

1 compared with each other. And so that gives you
2 an idea of how precise the model is, you know, how
3 well do different model outputs agree with one
4 another.

5 It's all -- it's done within the
6 model world. There are no comparisons to the real
7 world for either the sensitivity analysis or the
8 probabilistic one.

9 Q. Does the sensitivity -- what does the
10 sensitivity analysis tell you about the validity
11 of a model?

12 A. You know, really nothing, because,
13 you know, it's not part of -- it's not the model
14 validation step.

15 You know, when we're talking about
16 model validation and model accuracy, what we want
17 to know is how well does the model match the real
18 world, and that's the most important question.

19 When we're talking about the kinds of
20 things that they did with, you know, running the
21 model repeatedly and seeing how it behaves and how
22 different outputs compare to one another, that's
23 all within the model world. And so, you know, it
24 can be useful in telling you how the model itself
25 behaves, but it doesn't tell you anything about

1 how your model matches the real world.

2 Q. And for my understanding, this was a
3 concern -- was this a concern that you raised to
4 ATSDR?

5 A. Well, we talked about it.

6 And there's no concern with doing
7 this work per se, it's just the concern is that
8 these results not be represented as showing that
9 the model is accurate or as showing that the model
10 provides a good match to the real world, because
11 that's not what this does, and it can be easily
12 confused.

13 So it's important to clarify the
14 difference and to communicate that effectively.

15 Q. Okay. Did your assessment, this
16 assessment, raise any concerns about the
17 calibration of the Tarawa Terrace model?

18 A. Yeah.

19 Just the ones that I expressed about,
20 you know, they couldn't bring the model into the
21 calibration range in many cases.

22 And if you look at the last page,
23 2379, at the bottom, these graphs represent model
24 calibrations.

25 The circles are the observed

1 real-world concentrations and the lines are the
2 model-predicted concentrations, and these are at
3 five of the water supply wells.

4 And it's just -- you know, the model
5 is not corresponding very well to the circles, and
6 that's -- you know, that's -- that's an issue. It
7 makes you think the model is -- is not capturing
8 something correctly.

9 Q. After you raised concerns about model
10 calibration, what changes do you recall ATSDR
11 making?

12 A. I'm not sure they changed anything.
13 I mean, they did say that they felt
14 the calibration was successful, and to me this
15 shows that it was not. But I think they -- I
16 believe they stuck with that. And if they made
17 changes, I don't recall what they were.

18 Q. Did you raise concerns in the
19 assessment about the validity of the Tarawa
20 Terrace model?

21 A. I'm sure I must have.
22 If I didn't raise it here, I
23 certainly raised it soon.

24 Q. If you look at page 2375, the second
25 full paragraph.

1 It says, "Furthermore, all of the
2 measured concentrations were used during model
3 calibration, leaving no data available for model
4 validation. As a result, the Tarawa Terrace model
5 was not validated."

6 A. Okay.

7 Q. Is that -- did I read that correctly?

8 A. Yes.

9 And so yes, I definitely did raise
10 that validation concern here.

11 Q. After you raised the validation
12 concern with ATSDR, what changes or modifications
13 did ATSDR make regarding validation?

14 A. Well, for that one, it's really not
15 possible to change anything because, you know, the
16 change that you need is to have a validation data
17 set, and they just didn't have it. And when it's
18 in the past, you can't get it. You know you can't
19 measure concentrations from the past.

20 So, yeah. They were not able to make
21 changes to address that concern.

22 Q. What were your recommendations for
23 ATSDR regarding the Tarawa Terrace model?

24 A. Well, at this point our
25 recommendations were -- you know, this was

1 preliminary.

2 There -- you know, it was just
3 improved communication, talking about presenting
4 the uncertainty, recommended an expert panel,
5 which they did do.

6 One of the recommendations was just
7 finalize the remaining sections of the report,
8 because it wasn't all finished yet.

9 And then, you know, to take any
10 lessons learned from Tarawa Terrace into the
11 Hadnot Point scope of effort, which was, you know,
12 in the distant future still at this point.

13 Q. You said these were kind of
14 preliminary.

15 Do you recall additional
16 recommendations that you had for ATSDR related to
17 the Tarawa Terrace model?

18 A. Well, ultimately, you know, in
19 conjunction with the NRC, you know, we were saying
20 that, you know, the -- the monthly concentrations
21 are not accurate enough to be used in EPI studies;
22 and, you know, that given the complexity of the
23 site and the -- you know, the need to make
24 assumptions that you can't verify and the lack of
25 data to do data validation, that those historic

1 concentrations just simply cannot be
2 reconstructed. That was our position, and, you
3 know, the NRC said the same things.

4 Q. To the best of your recollection, did
5 ATSDR incorporate any of your recommendations?

6 A. You know, as far as I know, they went
7 ahead with EPI studies.

8 You know, I did see one of their
9 epidemiological studies. I think they did others.
10 I don't recall looking at them.

11 And then they also were planning to
12 do a mortality study, which they did do.

13 THE COURT REPORTER: When you get to
14 a stopping point, can we take a break? We've been
15 going about an hour and a half.

16 MS. SILVERSTEIN: Yeah. We can take
17 a break.

18 Yeah. We can take a break now. Now
19 is good.

20 THE VIDEOGRAPHER: Going off the
21 record at 5:41 p.m.

22 (Whereupon, a recess was taken from
23 5:41 p.m. to 5:50 p.m. EST.)
24

25 THE VIDEOGRAPHER: Back on the record

1 at 5:50 p.m.

2
3 BY MS. SILVERSTEIN:

4 Q. Dr. Waddill, do you remember sitting
5 on an expert panel related to the water modeling
6 at Camp Lejeune?

7 A. Yes.

8 Q. Do you remember around when that was?

9 A. Not exactly. Probably, 2009-ish.

10 Q. Does April 2009 sound right?

11 A. Yeah. I mean -- yeah, but I don't
12 really remember. Yeah.

13 Q. Okay. Why did you participate in the
14 expert panel?

15 A. Somebody must have asked me to do it,
16 and I -- so I wrote an opening statement and just
17 brought up some questions for the panel to
18 consider during the day.

19 Q. What do you remember about what you
20 said during the expert panel?

21 A. Well, you know, not much. It -- but
22 I read from a prepared statement, I believe.

23 And it was, you know, just asking
24 them to consider some of the issues that we've
25 been talking about, you know, accuracy versus

1 precision, and, you know, is the model capable of
2 producing monthly concentrations that would work
3 for an epidemiological study.

4 So just to kind of consider these
5 fundamental questions.

6 Q. What kind of -- when you say "these
7 fundamental questions," are you referring to
8 whether the model can work for an epidemiology
9 study?

10 A. Yes.

11 Like the issues we've been talking
12 about, you know, the validation, all of that. The
13 lack of data.

14 Q. Did you bring those questions to the
15 expert panel?

16 A. Yeah.

17 I just asked them to consider these
18 questions.

19 Q. To your recollection and knowledge,
20 did ATSDR incorporate or address these questions?

21 A. No. I don't recall that they did.

22 I mean, they had -- you know, they --
23 they were running the meeting. They had their own
24 agenda. And, you know, it just --- really, the
25 discussion never got around to the issues that I

1 had brought up.

2 Q. Are you aware of any changes that
3 ATSDR made to their approach to the water modeling
4 following the expert panel?

5 A. I don't recall any, but they very
6 well could have. I just don't -- I don't know.

7 Q. I want to talk briefly about the NRC
8 report.

9 What is your understanding of the
10 findings of the NRC report?

11 A. Well, I think fundamentally, the real
12 meaty issues that they raised were, you know,
13 concluding that the Tarawa Terrace modeling --
14 well, the situation was such that really a
15 qualitative evaluation was called for, rather than
16 a quantitative one, and you could categorize
17 people as exposed or unexposed but not give a
18 monthly concentration that they were exposed to.

19 They also clearly stated that, you
20 know, given the lack of data, the complexity of
21 the site, it's impossible to recreate those
22 historical concentrations accurately.

23 And, you know, significantly, too,
24 they raised the concern that if -- if you do that,
25 you run the risk of doing harm, because the

1 results are unvalidated and inaccurate, and so you
2 mislead people into thinking that that's what's
3 actually happened, when, in fact, it's -- and
4 these were their words -- that, you know, the
5 erroneous results, you know, lead to, you know,
6 implication, a false implication or exoneration of
7 the model exposures.

8 So, you know, it makes you think you
9 were exposed when you weren't or you were. You
10 know, it just -- and -- and that's just not good
11 for -- you know, that's not what we want for our
12 personnel. We want them to have good, accurate
13 information to make good health decisions.

14 And so, you know, those -- those were
15 significant concerns that the NRC report raised.

16 Q. Do you agree with the concerns that
17 were raised in the NRC report?

18 A. Yes.

19 I mean, certainly those that they
20 raised about the water modeling. They also
21 covered a lot of other ground, like EPI studies
22 and other things that I don't have an opinion on
23 because I didn't really focus on that. I'm not an
24 expert.

25 Q. Okay. So as it relates to the water

1 modeling --

2 A. Yes.

3 Q. -- do you agree with the NRC's
4 findings?

5 A. Yes. Yes.

6 Q. Do you -- in your opinion, did the
7 ATSDR water modeling efforts for Tarawa Terrace at
8 that point, and Holcomb Boulevard, reliably
9 estimate the concentration of contamination in the
10 water at Camp Lejeune from 1953 to 1987?

11 A. No. It did not accomplish that.

12 Q. Do you have an opinion as to whether
13 ATSDR water modeling followed the scientific
14 approach -- followed a scientific approach?

15 MR. DEAN: Objection. Object to the
16 form of the question.

17 THE DEPONENT: You know, I do not
18 think their results were scientifically valid,
19 because, you know, science needs to be based on
20 real-world observation and analysis. That's the
21 first thing, and there were just not enough
22 real-world measurements for this to count as a
23 scientifically valid approach.

24 The other thing that's fundamental to
25 science is that if you have a hypothesis, it has

1 to be testable and it has to be a hypothesis that
2 can succeed or fail. And the -- you know, the
3 idea that the model reconstruction of those
4 three-plus decades, '70s, '60s, '50s, there's just
5 no way to test that. There's no data to test it
6 against. So it's not a testable idea.

7 There's no way it can fail. You can
8 say it's successful, but you can't -- you can't
9 justify that claim.

10 And so for those two reasons, I just
11 -- I just don't think it's a scientifically valid
12 approach.

13 MS. SILVERSTEIN: Okay. I have no
14 further questions for you, Dr. Waddill.

15 Thank you for your time today.

16 THE DEPONENT: Sure.

17 MS. SILVERSTEIN: And, Kevin, if you
18 have --

19 MR. DEAN: Okay. Oh, yeah. I've got
20 quite a few questions, so let's rock and roll.

21
22 REDIRECT EXAMINATION

23 BY MR. DEAN:

24 Q. Dr. Waddill, during the break that we
25 took between my questions and questions from the

1 Department of Justice, did you have an opportunity
2 to talk to them?

3 A. I did not have an opportunity, and I
4 did not talk to them.

5 Q. Did you talk to them at lunch about
6 any of the questions that they may ask you about
7 after my questions?

8 A. No.

9 Q. Did you discuss your testimony
10 yesterday with them with regards to some of the
11 questions that were asked of you this afternoon?

12 MS. SILVERSTEIN: Objection. That's
13 privileged.

14 Don't answer that.

15 MR. DEAN: I don't think that is
16 privileged, for me to ask a witness about whether
17 or not the same questions that were asked today
18 were discussed yesterday in planning for your
19 testimony.

20 MS. SILVERSTEIN: Discussions about
21 -- questions about what we discussed during our
22 prep sessions are privileged, and I am instructing
23 Dr. Waddill not to answer.

24 MR. DEAN: Okay. Make sure we're
25 clear. I wasn't asking about the general nature

1 of the conversations. I was asking about whether
2 or not he was asked and you all discussed the
3 specific questions that you've now got on the
4 record for purposes for your preparation
5 yesterday, and I understand you've instructed him
6 not to answer, so we'll move on.

7
8 BY MR. DEAN:

9 Q. Now, Dr. Waddill, if I remember
10 correctly, you said your thesis -- and I agree
11 with you, there's two components to water
12 modeling. You can describe it differently, but
13 some people say it's the belowground and the
14 aboveground modeling; one's safe transport below,
15 and the other one's the mixing or the
16 distribution, I guess you could say. Right?

17 A. Yes.

18 Q. And your thesis and your Ph.D. is on
19 which, below or above?

20 A. Below.

21 My dissertation was on contaminant
22 transport in groundwater.

23 Q. All right. Now, the -- and we don't
24 have to go through them specifically, and I think
25 a lot of them are in the Harrison 2009 letter, but

1 your criticisms of ATSDR and that -- many that
2 you've discussed today either with me or with
3 counsel for DOJ, those criticisms you have of the
4 ATSDR water modeling to which you're testifying
5 today involved both criticisms of safe transport
6 belowground and distribution aboveground?

7 A. Well, I've stated that my focus was
8 on the belowground, and that's really --

9 Like, for example, the letter that
10 Mr. Harrison sent, you know, my focus was entirely
11 belowground, at least as much as I can remember.

12 I did say that the distribution
13 system modeling is not my area of expertise, and I
14 do recall ATSDR describing some of the
15 difficulties they were having and some of the
16 unknowns, but I did not really address that aspect
17 of the water modeling.

18 Q. Okay. Fair enough.

19 Now, you have described to me that
20 you've been with NAVFAC only about four -- well, I
21 say four or five. I know there were probably
22 multiple projects for each of these locations.

23 But have you authored and been the
24 primary or lead investigator for any previous
25 water modeling projects similar to what we've been

1 talking about today?

2 MS. SILVERSTEIN: Object to form.

3 THE DEPONENT: I mean, I've -- you
4 know, as stated, I was not the lead water modeler
5 for any of these projects that we've discussed.
6 My role was either in, you know, how do we apply
7 the model or how do we evaluate model performance.
8 That was my role.

9
10 BY MR. DEAN:

11 Q. I mean, isn't it true that in all the
12 work you've done for NAVFAC, which has been
13 commendable, but it's been basically in a
14 consulting role, reviewing what's been previously
15 done by somebody else and critiquing that work or
16 trying to suggest improvements to that work. Is
17 that fair?

18 A. No.

19 That's -- that would be fair to
20 describe my role with respect to the three
21 groundwater modeling projects that we discussed,
22 but overall, no, that's not correct.

23 Q. But you've not led a team and
24 conducted an in-depth document-mining effort,
25 analyzing the underground storage tanks, doing all

1 the work that was done at Camp Lejeune, and then
2 writing a peer-reviewed paper about it. That's
3 not something that was in your purview of history,
4 at least today?

5 A. Well, you know, I've written many
6 documents that have been reviewed, right up to the
7 Secretary of Defense. So, yeah.

8 Q. Well, I'm not talking about memos.

9 A. They don't apply to --

10 No. I'm not talking about memos,
11 either.

12 You know, very lengthy and in-depth
13 documents. And, you know, I've prepared countless
14 of those.

15 I'm just saying that, with respect to
16 the three groundwater contaminant transport
17 projects that we've talked about, I did not have
18 that kind of a role. You know, my role was to
19 evaluate.

20 Q. Okay. That's what I'm trying to get
21 you and I on the same page.

22 Your role historically in all these
23 various projects is to evaluate, improve,
24 critique, make suggestions to make the work
25 better, in your view. Right?

1 A. I'm taking issue when you say, "all
2 these various projects." You know, I'm only
3 talking about the three.

4 You know, in my career I have --

5 Q. Okay.

6 A. -- written many, many in-depth
7 documents, lengthy, and they have been thoroughly
8 reviewed by others.

9 Q. Right.

10 But what I'm saying is, other than
11 those three involvements, those are the only three
12 involvements you have had in water modeling
13 predictive analysis.

14 A. Those are certainly the most
15 significant ones, yeah.

16 Q. Okay. Now, is there some reason that
17 you forgot to tell the Department of Justice, the
18 judge, or jury who are watching this videotape
19 that the Brian Harrison letter was not drafted by
20 either Mr. Harrison or yourself? Is there some
21 reason you didn't tell us about that?

22 MS. SILVERSTEIN: Object to form.

23 THE DEPONENT: There's -- I don't --
24 I don't think your statement is necessarily
25 accurate.

1 BY MR. DEAN:

2 Q. Do you know who Jacobs Engineering
3 is, and before that, they were known as CH2M?

4 A. Yes.

5 Q. Does CH2M Hill draft letters for
6 NAVFAC and the Secretary of the Navy, as well as
7 memos and technical memos and things like that
8 which you and other NAVFAC employees edit before
9 they're put in final form for the Secretary of the
10 Navy, the Assistant Secretary of the Navy, and
11 other NAVFAC employees?

12 A. I'm not sure I understand the
13 question.

14 I mean, we do work with Jacobs,
15 formerly CH2M Hill. They are one of our big
16 contractors. We work on, you know, many, many
17 sites with them.

18 They prepare documents for us. They
19 make drafts. We work intimately with them.

20 I'm not aware of any of their
21 projects going to the Navy secretariat, but
22 perhaps. I'm just not aware of that.

23 Q. Well, you do know that 30 -- the
24 testimony yesterday by Ms. Kim Henderson, who was
25 a project engineer --

1 Do you remember Ms. Henderson?

2 A. I know her, yes.

3 Q. And she testified yesterday, reading
4 the 10K report, that traditionally and
5 specifically in 2023, that 31 percent of the
6 16 billion-dollar gross income that Jacobs
7 Engineering had came from the federal government,
8 like the work that we're talking about here. Were
9 you aware of that?

10 A. I was not aware of her testimony, nor
11 of that figure.

12 MR. DEAN: All right. What was the
13 last exhibit number, Madam Court Reporter, that
14 was used so I know I've got --

15 MS. SILVERSTEIN: It's 17.

16 MR. DEAN: All right. So I'll need
17 to go with 18?

18 THE COURT REPORTER: Yes.

19 (Whereupon, Waddill Deposition
20 Exhibit 18, Analyses of Groundwater Flow,
21 Contaminant Fate and Transport, and Distribution
22 of Drinking Water at Tarawa Terrace and Vicinity,
23 U.S. Marine Corps Base Camp Lejeune, North
24 Carolina: Historical Reconstruction and
25 Present-Day Conditions, Response to the Department

1 of the Navy's Letter on: Assessment of ATSDR
2 Water Modeling for Tarawa Terrace; ATSDR, Atlanta,
3 Georgia, March 2009; 64 pages, was marked for
4 identification.)

5
6 BY MR. DEAN:

7 Q. All right. I want you to take a look
8 in the folder, please, Mr. Waddill, when it shows
9 up and open up Exhibit 18.

10 A. Yes.

11 Q. Do you have it?

12 A. Got it.

13 Q. Okay. This is -- I've marked it as
14 Exhibit 18 to your deposition, but it was
15 Exhibit 14 to Ms. Henderson's deposition
16 yesterday, and is a memorandum that was drafted by
17 CH2M Hill -- it's Bates-stamped beginning CH38 --
18 that was done --

19 MS. SILVERSTEIN: Kevin, you uploaded
20 the wrong document. We've got the wrong document.

21 Our Exhibit 18 is the Response to the
22 Department of Navy's Letter on: Assessment of
23 ATSDR Water Modeling for Tarawa Terrace.

24 MR. DEAN: So I'm sorry.

25 Let me see. Hold on a second.

1 Marked exhibits, 18.

2 Yeah. Okay. We'll come back to that
3 one. Let me go get the right one. I clicked the
4 wrong one.

5 To be marked.

6 Exhibit -- yes.

7 All right. I'm sorry about that.

8 Take a look and see if you've got
9 Exhibit 19 in there.

10 MS. SILVERSTEIN: What should the
11 Bates be?

12 MR. DEAN: Say again?

13 MS. SILVERSTEIN: What should the
14 Bates be?

15 MR. DEAN: Let's see. Exhibit --
16 Exhibit 19 is CH38.

17 MS. SILVERSTEIN: Okay. We've got
18 that.

19 (Whereupon, Waddill Deposition
20 Exhibit 19, Memorandum: Subject: ATSDR Camp
21 Lejeune Water Modeling; CH00000038-44, Disco ID
22 448046-1 to 7, was marked for identification.)

23
24 BY MR. DEAN:

25 Q. All right. So do you recognize this

1 memorandum draft, Mr. -- Dr. Waddill?

2 A. I see I commented on it.

3 Q. And do you recognize that it was a
4 memo that was circulated around NAVFAC and went to
5 Mr. Harrison and was a part of the foundation for
6 the letter that you referred -- that you
7 identified earlier?

8 Does that refresh your recollection?

9 A. No.

10 I mean, I'm not aware, nor can I tell
11 in glancing at it, that this memo was used by
12 Mr. Harrison to write the letter.

13 Q. Turn to page CH39, and let me see if
14 this will help --

15 A. Okay.

16 Q. -- jog your memory.

17 Do you see the recommendations down
18 at the bottom?

19 A. Uh-huh.

20 Q. The first one says, "Department of
21 Navy should send a letter to ATSDR that clearly
22 states our agreement with NRC's conclusions about
23 the water model."

24 Do you see that?

25 A. I do.

1 Q. And requests that "ATSDR cease water
2 modeling efforts and adopt the NRC's suggestion to
3 simplify their approach by categorizing as
4 exposed, not exposed."

5 Do you see that?

6 A. Yes.

7 Q. "Request that ATSDR provide detailed
8 discussions on the" -- someone marked out
9 uncertainties and input accuracy -- "of their
10 model and practical limitations that prevent
11 accurate reconstruction and historical exposure
12 concentrations at Camp Lejeune."

13 Do you see that?

14 A. Yes.

15 Q. Those are all -- they may not be
16 worded the same way you have in the past, but
17 those were all some of the criticisms, or at least
18 some of them that you have had, you testified
19 about today. Right?

20 A. Yes.

21 And I raised them again and again,
22 and I've put them in writing again and again in
23 different ways.

24 Q. Right.

25 Now, you've --

1 Make sure there's not something else
2 here I want to ask you about.

3 Oh, go to CH42.

4 A. Okay.

5 Q. And I thought that you said you were
6 just trying to evaluate and assist, provide input
7 and have them, ATSDR, accept some changes and
8 improve upon their work. I may be saying it a
9 little bit differently, but isn't that what you
10 said?

11 A. Yeah.

12 That was the situation early on,
13 because we were still in the process of figuring
14 things out, and we wanted to work with them as
15 effectively as we could.

16 Q. And if you take a look at the bottom,
17 at Paragraph 2, Format for Review and Comment
18 Section on CH42.

19 Do you see the section there I'm
20 referring to?

21 A. Yes.

22 Q. And it says, "Review and comment on
23 facility-specific environmental matters." And you
24 made a comment. And can you tell -- read that
25 comment that you made there in the pink?

1 A. "I think Mary Ann has a point. ATSDR
2 will wriggle out of this -- wriggle out of this."

3 Q. So now, was it your testimony
4 earlier -- and I may have misunderstood -- that
5 when you sent that 2009 letter, Brian Harrison
6 sent it to Tom Sinks, that --

7 A. Well, wait. The letter I have is
8 dated 2008.

9 Q. Okay. What, December? Or what's the
10 date on that?

11 A. June 19, 2008.

12 Q. Okay. And you don't think you've
13 seen a response to that or it was -- or the
14 recommendations were not considered?

15 I can't remember exactly what you
16 said, but you said something along the lines that
17 you don't believe that those recommendations were
18 ever accepted or responded to or something like
19 that.

20 Do you remember what you said?

21 A. You know, I said at this point our
22 recommendations were fairly mild.

23 And, you know, I think they did
24 convene an expert panel. I noted that.

25 They did finalize the remaining

1 sections of the Tarawa Terrace report. I noted
2 that.

3 Applying all lessons learned to
4 Hadnot Point, I just noted that that was certainly
5 something we thought would be worthwhile.

6 And improve communication, that was
7 the fourth recommendation. I think they did make
8 an effort at that.

9 As I stated earlier.

10 So the four recommendations that came
11 out of this document, they did follow through on,
12 you know, most of them.

13 MR. ANWAR: Kevin, we can't hear you.

14 MR. DEAN: Sorry.

15 Take a look at your Marked Exhibit
16 folder and pull up Exhibit 20 I just put into the
17 box.

18 And I actually -- let's see here.

19 This is the last question, so just
20 bear with me. I've gotten the wrong document.

21 Well --

22 Okay. Here we go.

23 All right. It should be in there
24 now. I'm sorry about that. I was having to find
25 the marked version.

(Whereupon, Waddill Deposition Exhibit 20, Analyses of Groundwater Flow, Contaminant Fate and Transport, and Distribution of Drinking Water at Tarawa Terrace and Vicinity, U.S. Marine Corps Base Camp Lejeune, North Carolina: Historical Reconstruction and Present-Day Conditions, Response to the Department of the Navy's Letter on: Assessment of ATSDR Water Modeling for Tarawa Terrace; ATSDR, Atlanta, Georgia, March 2009; Contains Information Subject to Protective Order: Do Not Disclose to Unauthorized Persons; ATSDR_WATERMODELING_01-0000887461-887524, was marked for identification.)

MR. DEAN: Exhibit 20, for the record, is ATSDR_WATERMODELING_01-887461.

THE DEPONENT: Okay.

MR. DEAN: Through 887524.

THE DEPONENT: Okay.

BY MR. DEAN:

Q. Now if you turn to -- it's about the third page in. Bates stamp is 463.

You see a letter from Tom Sinks to

1 Brian Harrison. Right?

2 A. Yes.

3 Q. And it's dated March the 10th, 2009?

4 A. Yes.

5 Q. And he is responding to Harrison's
6 letter dated June 19, 2008.

7 Do you see that?

8 A. Yes.

9 Q. Have you seen this response before
10 today?

11 A. Not that I recall.

12 You're talking about this letter
13 right here?

14 Q. Yes.

15 A. I mean, I may have, but if I did, I
16 don't recall it.

17 A long time ago.

18 Q. Well -- well, you see it's very long
19 and detailed.

20 And if you turn to about page 466,
21 these are all the specific comments, some of which
22 are yours or questions that derive from yours.

23 A. Okay.

24 Q. Do you see that?

25 A. Now, this -- this, I probably do

1 recall.

2 I thought you were referring to
3 Dr. Sinks' letter.

4 Q. No. I was referring to -- my
5 understanding is you were -- I can't see the
6 exhibits because they weren't e-mailed. I'm not
7 fussing, but I don't know exactly what letter you
8 were handed.

9 I thought you were handed a letter
10 from Harrison to Sinks.

11 A. Yeah. That is correct.

12 Q. Okay. And this is that response.
13 Right?

14 A. Well --

15 Q. By ATSDR to Harrison.

16 A. Yeah.

17 I mean, it is a response to that
18 letter. They say it is.

19 Q. That's right.

20 And you have or have not seen this?

21 A. Well, I believe I have seen their
22 response, yes. But, you know, I'm just trying to
23 familiarize myself with all these many pages here,
24 so.

25 But, yes, I believe so.

1 Q. I understand.

2 But on page 464, you're shown as
3 being copied. You're the fourth to the bottom,
4 D. Waddill.

5 A. Yeah.

6 And I'm not saying I didn't get this
7 letter. I'm just saying I didn't recall it.

8 Q. Well --

9 A. But I also am telling you that I
10 recall seeing their response, which is many pages
11 following that letter.

12 So, you know, if I misunderstood your
13 question --

14 Q. You testified --

15 A. -- originally, I apologize.

16 Q. No.

17 You testified a few minutes ago in
18 response to DOJ's questioning that -- that you
19 were not aware of your concerns that were
20 expressed in Brian Harrison's letter ever being
21 addressed or -- or responded to by ATSDR.

22 A. That is incorrect. And we've --

23 Q. And responded --

24 A. That's incorrect, and we've already
25 been over that.

1 You know, I said that they did
2 respond to the four recommendations in that
3 letter.

4 What they did not appear to respond
5 to was other -- other concerns that came later.
6 That was my previous testimony.

7 Q. And these -- and this is those
8 responses to your concerns that they're responding
9 to in March of '09 before the NRC report is issued
10 in June of '09. Right?

11 A. That appears to be correct.

12 Q. Did you, Mr. Harrison, anybody with
13 the Navy, anybody with NAVFAC, did anybody respond
14 to this March 10, 2009, letter and rebut any of
15 the positions or take issue with any of the
16 positions raised by ATSDR in this letter before
17 the NRC report was issued?

18 A. I don't know.

19 I believe that I did respond to this
20 letter. I'd have to look at it more carefully to
21 be sure, but I do not recall the timing.

22 MR. DEAN: Well, I'll tell you this:
23 I anticipate resuming your deposition when all of
24 your documents are produced.

25 So we'll end the deposition today and

1 suggest that if you -- if and when we do
2 reconvene, you might want to be prepared to show
3 me where you respond, or Brian Harrison or anybody
4 with the Navy, responded to this letter in some
5 fashion.

6 So with that, I conclude this part of
7 your deposition, and I certainly appreciate your
8 time.

9 I'm sorry we went late, but I do
10 appreciate the accommodation given the storm that
11 we have here in the Low Country.

12 MR. ANWAR: And, Kailey, before we go
13 off the record, I just want to put on the record
14 that, you know, our understanding of this
15 deposition is that it's closed. It happened.

16 You had the opportunity to ask your
17 questions.

18 We're happy to meet and confer with
19 you after the fact. But, you know, we don't agree
20 with your characterization of the conclusion of
21 the deposition.

22 MS. SILVERSTEIN: Additionally, these
23 ATSDR documents are publicly available.

24 MR. DEAN: Yes. You're talking about
25 all the documents that are being hidden on his

1 laptop, or are you talking about the document I
2 have on the screen?

3 MS. SILVERSTEIN: Your questions
4 regarding the ATSDR letters, these letters are all
5 publicly available.

6 MR. DEAN: I got you.

7 Well, guys, I love doing business
8 with you, but I don't believe we agree on much
9 when it comes to the state of evidence in this
10 case.

11 I understand your point, Haroon, and
12 you guys have a great day.

13 MR. ANWAR: You, too.

14 THE VIDEOGRAPHER: This deposition is
15 complete at 6:32 p.m.

16 (Signature was not waived.)

17 (Whereupon, the deposition of DAN
18 WADDILL, Ph.D., was concluded at 6:32 p.m. EST.)
19
20
21
22
23
24
25

CERTIFICATE

I, Bobbi J. Case, RPR, CCR, and
Notary Public for the Commonwealth of Virginia at
Large, do hereby certify that prior to the
commencement of the examination, DAN WADDILL,
Ph.D., was duly sworn by me to testify to the
truth, the whole truth, and nothing but the truth.

I DO FURTHER CERTIFY that the
foregoing is a verbatim transcript of the
testimony as taken stenographically by me to the
best of my ability, at the time, place, and on the
date hereinbefore set forth.

I DO FURTHER CERTIFY that I am
neither a relative nor employee nor attorney nor
counsel of any of the parties to this action, and
that I am neither a relative nor employee of such
attorney or counsel, and that I am not financially
interested in this action.



BOBBI J. CASE, RPR, CCR

Notary No. 181018

NCRA No. 837774, VCRA No. 0315042

DECLARATION UNDER PENALTY OF PERJURY

I, DAN WADDILL, Ph.D., do hereby
certify under penalty of perjury that I have read
the foregoing transcript of my deposition
testimony taken on August 6, 2024; that I have
made such corrections as appear noted herein in
ink, initialed by me; that my testimony as
contained herein, as corrected, is true and
correct.

Dated this _____ day of _____,
2024 at _____, Virginia.

DAN WADDILL, Ph.D.

COMMONWEALTH OF VIRGINIA AT LARGE, to wit:
City/County _____

Subscribed and sworn to before me this
_____ day of _____, 20____.

Notary Public

MY COMMISSION EXPIRES:

ERRATA SHEET

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DAN WADDILL, Ph.D.

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Rules of Supreme Court of Virginia

Part Four - Pretrial Procedures

Depositions and Production at Trial

Rule 4.5

(e) Submission to Witness; Changes; Signing.

When the testimony is fully transcribed, the deposition shall be submitted to the witness for examination and shall be read to or by him, unless such examination and reading are waived by the witness and by the parties. Any changes in form or substance which the witness desires to make shall be entered upon the deposition by the officer with a statement of the reasons given by the witness for making them. The deposition shall then be signed by the witness, unless the parties by stipulation waive the signing or the witness is ill or cannot be found or refuses to sign. If the deposition is not signed by the witness within 21 days of its submission to him, the officer shall sign it and state on the record the fact of the waiver or of the illness or absence of the witness or the fact of the refusal to sign together with the reason, if any, given therefor; and the deposition may then be used as fully as though signed unless on a motion

to suppress under Rule 4:7(d)(4) the court holds that the reasons given for the refusal to sign require rejection of the deposition in whole or in part.

DISCLAIMER: THE FOREGOING CIVIL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE STATE RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

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Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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